



TRICKY



An Introduction

1 Give Sorrow Words

Stephen Beirne

2 Unreliable Words

Amsel Von Spreckelsen

3 Anyhowly Anyhow

Krish Raghav

4 Gassy Choose Your Own Adventure Weirdo

Stephen “thecatamites” Murphy

5 Glitches: A Kind of History


Alex Pieschel

6 A Conversation with Lilith

Zolani Stewart

A - Index

B - Back Pages

A person is walking away from the camera on a paved path that leads towards a bright sunset. The sky is filled with soft, white clouds, and the sun is a large, glowing orb on the horizon. The person's shadow is cast long and dark on the path ahead of them. The background shows some greenery and a fence line in the distance.

The Arcade Review #3 is going to be the last issue we'll be publishing this year. We're planning significant changes to the magazine, internally and externally, concerning the content we put out. We want to expand the scope of our writing—different kinds of work outside of the longform piece—but also implement a better pay and subscription model, as well as a more workable budget. We'll be taking the months ahead to work on these changes.

The fall will also be an opportunity for Alex and I to think about what The Arcade Review is meant to **do**, what the point of this magazine is, and what our direction should be for next year. This magazine was started as a freak project, a “what if,” born out of frustration and a yearning, but I've realized the importance of something like this, and what it's capable of accomplishing. Our first year has been amazing, better than I could have imagined, and I only want to do more with The Arcade Review.

But until then, we're sending off 2014 with one of our best issues yet! This time, we're opening with Stephen Beirne, as he takes apart the layers of *Rabbit Rush*, taking us through its narrative and examining its recursive “realities.” Then we move to Amsel Von Spreckelsen, who asks what the place of the unreliable narrator is in videogames by looking at Interactive Fiction.

Next, Krish Raghav demonstrates the significance of the political satire *PAP 2048* to Singaporean context, giving us an incredible history of the city-state's ruthless political culture. Then, Stephen Murphy discusses a long-lost RPG Maker title *Choose Your Own Adventure Weirdo* and its accidental subversive qualities. And as a final bang, our own Alex Piechel writes an extensive historical piece on the Glitch Aesthetic, taking us from early modernist art to the digital scenes of net.art and videogames themselves, the pop curiosities of 21st Century digital culture.

For our summer interview, I was honored to have the chance to chat with the game creator Lilith about her work and influences. It's one of our most succinct interviews so far.

And thanks again to the usual supporters, our friends and peers, many of whom are linked in our back pages. A thanks to Ellie Rassia, this quarter's cover artist who was great to work with. And a thanks to you, for taking time with the work that we create with immense love, peculiarity, and vulnerability.

Zolani Stewart, Founding Editor

Give Sorrow Words

By Stephen Beirne

*Yet if hope has flown away in a night or in a day
In a vision or in none, is it therefore the less gone?
All that we see or seem is but a dream within a dream.*



Rabbit Rush's narrative is contingent on its secrecy. I've given you a quote already that's clue enough to what the game wants to tell a story about and how it goes about the telling. From where I'm sitting, it screams out as a spoiler, threatening to interrupt your assimilation into the narrative, though I suppose if you haven't already played the game it's probably little more than a nice, if meaningless, bit of prose. Nevertheless, hanging it at the top there like a welcome mat seems almost dangerously revealing, because this is a game that withholds, deliberately, cautiously, a personal story predicated on apprehension towards itself.

"All that we see or seem is but a dream within a dream."

It's an established technique, established by whom I don't know, perhaps the Gods of Storytelling, that for the player to know what they're striving towards they need to know what it tastes like. "Home sweet home" means something more substantial when that sense of home is made tangible, rather than left to lie as an abstract conception of safety and comfort. Give them a glimpse before stealing it away until the adventure's end. Home is my family, home is my village before the war, home is the real world outside of this accursed haunted mansion. Home is the people I love and the time when we were together.

It's often the case that where we enter into a game as new players heavily informs our impression of the game's world and what we might expect from the journey to come, whether it will be a place filled with terror

and loathing, or whether you'll spend the next dozen hours pining after the contentment of home. Some designers will use this moment to instil the player with an appreciation of their game's graphics or 'atmosphere', and rely on this first impression to prolong their attention far after the point where it's no longer warranted.

Rabbit Rush starts with a bright and engaging arcade game, wherein you move rabbits from house to house, earning points and making a greater flurry of colour and sound the better you perform. This involves you clicking and dragging to define your critters' direction of movement as the screen scrolls endlessly, hungrily upwards. Inevitably, you'll fail to keep up with the camera and fall behind, and the game will compliment your successes, tally up your cash and send you on to the storefront. It advertises a bunch of levels to unlock and plenty of skills to purchase to improve your ability to move rabbits from one house to another, to nourish and validate your greed.

It's all very soothing and slick in its familiarity; the bright neon colours sufficiently stylize an arcade experience to soften its blunt premise: you're invading neighbouring towns to combat Rabbitville's overpopulation. The satisfaction of moving things with the rewards of cheers and colours and cash stifles the cruel reality of large-scale rabbit warfare. It's a fun game, don't worry about it.

For the duration of *Rabbit Rush*, this will remain your first point of contact with this world, and your safe zone. For a lot of players who enjoyed arcade games like the neon *Rabbit Rush*, it likely has a romantic edge to it, as a beacon from their childhood. It certainly was for me—the

flashing simplicity of its visual and mechanical aesthetic and its eagerness to please feeds into my nostalgia for the arcade which, in my case, represents the summer holidays of my childhood in coastal Irish towns, when the rain or heat of the sun forced us to take refuge indoors. As with many flatterers, there's the temptation to overlook the narrative's misgivings so long as it can suspend me in the place of my youth.

Before long the game grows surreal and abstract, so here I throw up my hands as a silly little fallible mortal: I'm not sure if I know what *Rabbit Rush* is actually about. It looks to have an autobiographical slant, but there's plenty of allusion and metaphor to scramble the story, defying a 'true reading'. The best I can do is commit to my interpretation of it, one that might end up hitting far off the mark intended by its creators, but there is, I admit, a piece of me in this reading and I am inclined to allow it see the light of day.

This colonialist arcade game becomes your entry into the world of *Rabbit Rush*, and your point of reference for all that follows. After playing through a few matches and slaying hundreds of fuzzy little foreigners, a chat window pops up. The correspondent tells you they're coming over to your apartment, but then entices you with a mystery: while you're still at the game, why not try clicking on the carrot in Mr. Rabbit's shop? Doing so causes the game to glitch, break and close, and suddenly you're booted out to an arcade café in a first-person perspective.

From here on things begin to get a little odd. Dozens of *Rabbit Rush* cabinets fill up the room in which you now find yourself. You can interact with the cabinet you originally came from and

return to the manic arcade game, or you can go about exploring the arcade itself. If you choose the latter you'll soon find a note addressed "My Dear Friend"—it's by the person from the chat window. They say they just missed you, which leads you to a key to unlock the front door and walk out into a midnight street.

Before you now, opposite the arcade cafe, is a line of closed-up shops whose names when strung together compose the opening poem of this piece, ending in "All that we see or seem is but a dream within a dream." The street's atmosphere matches this eerie suggestion. Like the arcade game, the area is lit in a haze of neon blush as if your eyes are fogged by the presence of colour. The lights of the shops and street lamps flare up as you approach them. With an uncharacteristic burp of tactlessness, a signpost names this as the intersection of Crazy Street and Lunatic Avenue. Nearby is another note, this time recounting an experience from your shared past about waiting for the bus and missing it by dawdling in the arcade cafe. Its author is nowhere to be seen. But for you, the street is deserted.

Down one alleyway bordering the Arcade Palace stands a mirror impossibly tall and wide—so wide it cuts right through the buildings on either side and continues through to the alleyway one over. A note and a handlebar hang on it here, but by grabbing the handlebar you can drag the mirror backwards all the way to the shops, whereupon it takes up the length of the street, and locks in place. It's an environmental puzzle that makes no worldly sense, and you solve it through no sensible chain of causality: the mirror shatters after reading a note that used to exist only as a reflection. Like a dream, this reality is

governed by ideas, not laws. It's a flexible mental construct vulnerable to fleeting whims and instructions of neurosis: a place from memory.

With the mirror out of the way, you can now follow the path to the opposite side of the Arcade Palace, where you find another note. This one is blank, however, and attempting to read it disrupts the game. The pause menu opens, selects 'quit game', and the screen goes black. You're shown filmed footage of a camera rescinding from a computer monitor and then a new scenario begins. So continues *Rabbit Rush*.

For its length you're taken and sent through many different 'realities', by which I mean many different ways though which the world is represented via the language of the medium. Sometimes the end of a reality is marked by the signal error of television static, or by the electric shrinking of an old CRT telly powering down, while others are punctuated by the filmed footage of someone backing away from a computer. This act of rescinding, of stepping out from some distant reality, describes the overarching flow of your narrative of play as slowly passing from these hyperrealities to images of a gameworld which more closely resemble the real world.

From here, you have anecdotes of the author's experiences with your note-leaver set against photographed backdrops, representing memories that exist in a cognitive reality that is distinct, but correlative to our existence in the physical world. Then, panoramic shots of local scenery represent presence in the physical sense, where the player can look all about and see real, existing locations, like a park or somebody's back garden. My 'memory' of the event and my exploration

of the digitized panorama of a 'real park' never quite converge on the 'true' reality that these things represent, by actually remembering or visiting the park. But as approximations to reality they're closer than a neon arcade game.

This is the direction we as players are pointed, trending on a spectrum from extreme hyperreality—those fantastic, impossible representations via virtual worlds—towards realism. It's no accident that as each scenario stylistically moves toward realism, the mechanics of that reality increasingly degrade: as the player, you become less of an active, interfering agent and more of an observing participant, and the sudden juxtaposition slams you back towards consciousness and away from the virtual facsimile as a place of entertainment and of fantasy. Themes of escapism are crux.

So as the player nears the climactic reality of *Rabbit Rush*, the game increasingly absolves itself of opportunities for mechanical interactivity. Traditionally in critical and design circles, mechanical interaction is held as the pinnacle of a player's ability to engage with a game, and is usually defined in its most basic form as 'press button to make stuff happen.' In practice, this means something with a complex mechanical tree of systems and inputs is deemed 'more of a game' than something without it, leading inevitably to a cultural crisis of form. Sadly, this design paradigm does not value the potential to cognitively and emotionally interact with a game as reflective of player interactivity. I'd venture *Rabbit Rush* is fully aware of how negligent that is of a player's relationship with a game, given how its depletive structure of play corresponds to the plot.

Early in the game you're made aware of this companion to the player-character, The Girl in the Orange Scarf, whose relationship with the author forms the core of the game's story—it is she who is initially coming over to meet you, before you spy the note saying, oh, she must have missed you. Subsequent notes littered around some of the realities reminisce on your shared childhoods and offer dollops of advice as clues to solving its puzzles. The author's memories talk of how they and The Girl in the Orange Scarf used to hang out together, the author playing games until all hours of the night, as she spent her time reading or occupied with her phone. Theirs was a distracted, nonchalant relationship that bloomed into friendship. The author reflects how she was prone to bouts of fancy in your standard manic pixie way, and how their friendship eventually grew dependable and valuable.

I think she died. The author's desperation to defy their failing memory reminds me of how we struggle against time to remember the moments we shared with loved ones long passed. It's different than faintly recalling a treasured friendship with someone who has since moved far away, as if these decaying memories of The Girl is all the world has left of her.

To preserve the time they shared, the author has built a fortress around reliving their youth and conjures notes and secrets to resurrect her. The videogame that occupied those nights when she was around becomes a safe zone from the reality of her death, a world where the author can go to relive the ambient feel of her companionship and escape the fact of her loss. *Rabbit Rush*, the arcade game, is a refuge of the author's childhood, familiar and comforting,

where we can shut ourselves off from the harsh reality of our actions and just be. At any point when we find ourselves drifting closer to reality, we can retreat to the arcade cabinet to re-exert it as our safe zone, free from the confusion of the outside world. We shy from acknowledging our deplorable actions as Rabbit Army Commander, just as we deceive ourselves in our attempts to fortress ourselves from our grief.

It's a fragile sanctuary. Consciousness will boot you out one step closer to reality, since escapism can't survive the reflection of a self-conscious mind. Though the mind repeatedly reverts to soothing hyperrealities, the part of The Girl that lives within the author is a demon to the author's denial. Through her notes and clues she urges us to progress through the game, solve its puzzles, break out of the happy fiction and recollect ourselves, to face the truth.

In retaliation against their own warring mind, the author seeks escape in dreams and classroom puzzles of 'Xs and Os', but each ends only in remembrance of the past as a fading thing. The Girl's pet rabbit Juno, a symbol of a devastation of her childhood, informs the rabbit motif common to the author's constructed realities, beginning with the arcade game and recurring throughout each subsequent scenario. The motif grows more sinister and disrupting, poisoning the author's attempts to relive the past by visiting places of their youth. Each trial slams you back into the fantasy, but with every revisit it is slowly dismantling.

Although the arcade game was originally constructed to preserve a bygone sense of happiness, it too is an untenable fantasy,

mirrored in Rabbitville's story of collapsing under an unstable overpopulation. *Rabbit Rush*, the arcade game, shifts from a reality of comfort to one of fear and revulsion, eventually invading attempts to relive the presence of The Girl through the places they had been together, as demonstrated through the shopkeeper, Mr. Rabbit, who becomes a figure from a slasher movie, chasing you from one scenario to the next. The varying realities start to bleed into one another, striking up continuity as the fantasy superstructure crashes down. It destroys the game and the café as places of escapism so the only way to go is outwards to true reality, culminating in the player confronting The Girl's heirloom to you: an orange scarf.

So, *Rabbit Rush* associates a rising degree of mechanical freedom with characteristic immaturity, in so far as entertaining pleasant delusions to hide from one's sorrow constitutes a dearth of psychological wellbeing. But to what end does it draw this correlation, and what are the philosophies embedded in this narrative?

One could say that videogames as cultural objects represent a drive towards escapism that *Rabbit Rush* casts as wilfully self-destructive and decadent. To fortress oneself away from any sour emotion is an act of self-indulgence. In this sense, *Rabbit Rush* follows a pattern of disregard for the medium of videogames: it begins with the utmost fantasy and slowly strips away the layers of self-deceit until nothing remains but to return to reality. For the author, this means acknowledging the death of their friend. For the player, it means the game ends and you cease engaging with it.

If *Rabbit Rush* were making the claim that videogames are best when turned off, in essence it would be saying the world would be better if *Rabbit Rush* didn't exist. It is a game, after all, and games are dreadful things. This self-loathing is common enough among some popular shooty games whose stories eventually relate the surprising moral that shooting people is bad. In such cases, a certain amount of dissonance is inevitable between the self-critical plot and enjoyable shooting, but the stories often tend towards the cynical, and nihilism finds within it a comfortable home. For *Rabbit Rush*, whose story veers towards celebrating life, such nihilistic undertones would only counteract the plot's joyful conclusion. Contrasting this finality of self-acceptance against a rejection of the method by which you eventually find it leaves the game in somewhat of a quandary. The implication is *Rabbit Rush* can't be uplifting if it's consumed with what it detests.

Whether a part of the game tends towards realism or hyperrealism is determined by the feel of the mechanics in conjunction to the style. The less neon a scene, the less mechanical control you can exert, the more it approaches realism. This relationship between style, mechanics and representation is a deliberate choice on behalf of the game's creators. It is not enough to assume that a game with fewer skills to unlock, puzzles to solve and buttons to press is less of a game than, say, *Fallout 3*, since that would suggest *Rabbit Rush* can be diced up into individual parts of "game" and "not-a-game", placing its platforming, puzzle and arcade sections in the former box and its visual novel, panoramas and 'walking simulator' sections in the latter box. The question here is whether *Rabbit Rush*

asks that it be so vivisected in order for it to be made coherent. However, since the nature of each segment depends on its juxtaposition and compatibility with each other segment, to divide and compartmentalize results in losing that vital narrative born out of their unity in composition. To favour that composition, we must find value outside of mechanical interaction.

As well as telling a tale of games as tools for escapism or as conduits for one's emotional and psychological growth, *Rabbit Rush* credits genre conformity as a symptom of backwards attitudes. The more a segment mechanically corresponds to an established genre, the more it is stylized and the less it favours *Rabbit Rush*'s key theme of acceptance of reality, whether in the stop-motion platforming section where the player controls a stuffed rabbit toy, or the neon arcade game which overtly discourages self-reflection, glitching out like a deer in the headlights.

Choice of genre in each case is itself a stylistic choice, because genre adherence represents an aesthetic decision, a dramatic decision, made against the backdrop of all videogames' cultural history. Few games, when being made, are oblivious to the mechanical structures established throughout the history of the medium. Most draw upon that cultural resource as inspiration and depend on the player's immersion in the culture in order to access and appreciate the game at all. Genres are artefacts; they are a narrative component in the form of a game's superstructure.

Whether *Rabbit Rush* is condemning the existence of genres in a general sense, I'm not sure. I don't think so. Rather, I believe it's using the presence of genre to conjure imagery

of tradition, and associates infatuation with tradition with regressive, self-destructive tendencies. In this way it might be a call to action for game designers and other creators of the medium to cease obsessing over established, over-trodden roads and to branch out as befits their desired narrative. In another sense, it could be chastising those people who buckle at the thought of a Twine game, who prize this or that mechanical niche to preclude all else as 'not actually games', as a way to dismiss their existence and their authors. Through this interpretation, *Rabbit Rush* retains its love for life.

There is another thing. At one point in the game, The Girl's note asks you to stop playing, to open up the pause menu and quit back to your desktop. But instead of actually closing the game, you're faced with the nostalgic turquoise of Windows 95 and a single notepad file named Home.txt. It marks her final letter to you, but speaks of how you will soon meet once more, which happens at the game's end.

Through the construction of all their fantasies, the author was attempting to recapture the feel of their bygone friendship with The Girl. They sought after a lost time with the belief that this was supposed to always be, that they belonged in the past with all its swollen, dead imagery, for true reality was no place for them. This inevitably proves unsustainable, and as they're forced out of the fantasy this text document, Home, encapsulates the refutation of all that they pursued. What we seek as home is not a physical place or the co-presence of certain people. It's the feeling of a time, perhaps long past, of comfort and safety, made manifest in the present by acceptance of one another and of ourselves. You

can never recapture that past time—any attempt to relive it will be but a shade of what it was. Only by accepting the past as irretrievably gone can you begin to discover your current place in the world, and to find for yourself a new time to call home.

Stephen Beirne writes at his personal website, normallyrascal.com. You can contribute to his work at patreon.com/byronicM.



Unreliable Words

By Amsel Von Spreckelsen

Every section of Adam Cadre's *Photopia* has an associated colour. You begin the sky blue section with your unnamed astronaut standing before a crystal labyrinth. The text describes the labyrinth simply as "iridescent," but previous visits suggest the crystal is blue. The maze itself is unsolvable until, eventually, as you wander the corridors, the game prompts you that your space suit is both unnecessary in this planet's atmosphere and starting to get too hot. Upon removing the suit, you learn that you are not human, or at least not the form of human that you had previously assumed that you were. The puzzle is unfair, but this

moment provides one of the purest feelings of joy I have experienced playing a parser game.

Photopia is a game about possibility collapsing into early death. Alison, and the woman that she will never become, is at the centre of and diffused throughout the story. The sky blue puzzle's reversal of your expectations as a player provides a key to how you should be looking at her life. The space suit symbolizes the expectations that Alison, later revealed to be narrating the colour-coded sections, feels are imposed upon her. The tragedy is not only death itself, but the way in which the arrogance of adulthood crushes the youthful

drive to ask questions about what constitutes the necessary rules of the world. *Photopia* is a game that is angry about the death of a teenager for both personal and philosophical reasons.

The game never lies to you; you can take the space suit off any time it is safe to do so, but the fact that the narrative (as opposed to the text) dissembles on this is the key to a form of unreliability that is especially suited to games. The story puts the onus of discovery and action on the player while maintaining plausible deniability. During the colour sections the narrator tells you the meaning of words and tells you not to go to sleep if you dawdle. Towards the end of the game you discover that this is because the narrator is Alison talking to you, both player and character, who in this situation is a small child, curious but sleepy. She is shown to be narrating a story that she is making up as she goes along in response to your prompts. Yet the story cannot be made up, truly, due to the way in which parser-based text adventures work. The world is already constructed, the parser merely navigates it. *Photopia* will be the same, more or less, every time it is traversed.

It would be possible to create a text adventure that is algorithmic in nature, in which there is no underlying reality to be explored. Or at least one where there is no consistent underlying world but rather an instanced, branching reality created in the moment rather than a mapping of spaces. There is a grand tradition of choose your own adventure books that are predicated on narrative rather than the goal-driven, territory-traversal concerns of the Fighting Fantasy tradition. Kim Newman's *Life's Lottery* and Ryan North's Hamlet adaptation *To Be or Not*

to Be: That is the Adventure provide options that expand and proliferate based on the emotional causality and narrative arc of the player's previous decisions. Therefore a character's personality can change in different read-throughs, allowing for different levels or forms of unreliability, depending on the choices made.

Motivation is one of the areas of exploration most suited to Twine games. Twine, like the choose your own adventure titles mentioned above, allows easily for actions to remain the same across different playthroughs while motivations change. Parser-based interactive fiction requires a consistent, explorable world to be built in the code. This world-building is similar in many ways to the world-building that is currently standard for visual games. In fact, in the early days of computer games, visual worlds were flatter and more abstracted than, say, the sprawling dungeons of *Zork*.

The idea of what narration is and who narrators are is not always as clear as it seems. Wayne Booth, who introduced the concept of unreliability as applied to narrators, did so in the context of a project separating out notions of actual author, implied author and narrative voice in fiction writing. All of these entities are involved in telling a story, and narrative voice can be abstracted, located in a character, or shared by multiple characters. Similarly, non-narrator characters may themselves narrate stories internal to the wider narrative, becoming narrators with greater or lesser credibility. This story-within-a-story structure is common in Conan Doyle's Sherlock Holmes novels, in which both narrative voice and narrative reliability are often switched from Watson to a suspect.

*"I shall call a narrator reliable when he speaks for or acts in accordance with the norms of the work."*¹

Narrative unreliability is defined and located for Booth in the ironic distance between the narrator and the implied author. If a character narrates in a way that clearly encourages the reader's disbelief then that distance is not ironic, but rather explicit. In other words, a character lying about the situation is not the same as an unreliable narrator: "We should reserve the term unreliable for those narrators who are presented as if they spoke throughout for the norms of the book and who in fact do not do so."²

Irony, and ironic distance, here refers to the text maintaining two conflicting views simultaneously: that of the implied author and that of the narrator. Where Phillip Marlowe maintains that he acts only for personal gain but Raymond Chandler implies to us a world in which Marlowe is a lone moral agent you have a case of unreliability, even though you never feel that events have been presented inaccurately. As a point of contrast, Chief Bromden in *One Flew Over the Cuckoo's Nest* states outright that his account is 'the truth even if it didn't happen', a position that clearly aligns with that of Ken Kesey's.

When we approach audiovisual media our natural tendency is to believe that the cues for locating narration are the same as those for a written piece. It is easy to imagine that the a voiceover or onscreen text are narrating the game to the player in a manner equivalent to the voiceover in film noir. In both films and visual games, however, while a character might be a narrator, they will be so either alongside or more correctly in subservience to the camera,

the mise en scene, the full range of textual clues and construction afforded the medium.

In this respect we need to stop seeing narrative as essentially text-based or vocalised, but look at the language of cinematography, space, and landscape. On landscapes, Anne Whiston Spirn writes,

*"Landscape has all the features of language. It contains the equivalent of words and parts of speech - patterns of shape, structure, material, formation, and function. All landscapes are combinations of these. Like the meanings of words, the meanings of landscape elements (water, for example) are only potential until context shapes them. Rules of grammar govern and guide how landscapes are formed ... The context of a word or sentence, like that of a hill or valley, defines it."*³

To find the implied author of an audio visual piece one must go back to the gestalt entity usually termed the director, but the author also consists of the intention of all of the people, from script writers to costume and character designers, who have worked to design the world. The reader must then infer a combined point of view. One of the most seductive aspects of auteur theory is the idea that the author's point of view might be singular rather than constructed by multiple agents; the more people working on a text, the more complicated and diffuse the location and identity of the implied author can become.

In games we might want to locate the implied author in the code, as the focal point between creative team and representational enactment. This might be a useful shorthand, but one that shouldn't become dogma. The narrator in a game has a similarly complex identity, both centred

and diffuse, but my position is that a given play of a given game is narrated by the player as they play. What I mean by this is that a game is both written and performed, authored and emergent. Different games will occupy different positions along these two axes, but as a consequence of this performative nature a game's narrator has to be considered as the product of the player(s) playing (with) the game. The player narrates the game by moving through it, by uncovering it and by their unique interactions within it.

This is perhaps easiest to conceptualise by looking at the three-dimensional realist idea of space that permeates mainstream video games, although the insight should be one we can take back with us into 2D and textually represented spaces. Zoya Street writes about how the introduction of 3D helped cement, or maybe uncover, a manner of narrating through play:

*"So the shift to 3D gaming is not really about polygons alone. It's about paths of movement, a more subjective, sited and fluid thing that cannot be entirely contained in the design of the software itself. Players will determine their own paths of movement and their own spatial interactions, but level designs determine the dynamics of mobility,"*⁴

By choosing how to move within the space provided and interacting with story elements such as collectibles or scenery, the player can control the narrative and thus the narrator. In a game that features choices over actions, provided either through branching storytelling or an authorial massaging that legitimises all choices, the narrator and author are of the same view. There is no ironic distance, merely unexplored and ultimately rejected possible outcomes.

However, in a game in which time is of the essence, and the authored world is constantly pointing this out, yet the player is allowed to do things at their own pace, the player is narrating the events unreliably because the player-narrator's account of events cannot be true if the author-provided timescale is also to be believed.

Despite this location of narrator in the player, many games will attempt to force their own narration through scripting, pathways, cut scenes, or anything that contributes to a 'standard' narrative to be experienced by a 'standard' player. *Photopia*, however, succeeds in its deception through omission. It creates, at least in the initial playthrough, an ironic distance between what is in the code and what is perceivable by the player.

Deception through omission has been a feature of text adventures since their inception, although not necessarily a well loved one; Of *Zork*, Greg Costikyan says, "[t]here is no opposition, there is no roleplaying, and there are no resources to manage; victory is solely a consequence of puzzle solving."⁵ The game elements of interactive fictions like *Zork* or *Hitchhiker's Guide to the Galaxy*, as well as Fighting Fantasy-style gamebooks, distribute information on how to solve puzzles across multiple playthroughs, deliberately obscuring it to be eventually accrued by the player. Jackson and Livingstone's *Creature of Havoc*, like *Photopia*, refuses to even tell you what or who you are at the beginning and later, gleefully informs you that much of the background provided is probably false.

I would not call the sparse narration of most parser games as going against the implied authorship embodied in the pre-coded world.

Photopia leads you to believe, through its manipulation of social forms of expectation, that the world is a certain way. *Zork* merely refuses to tell you anything until you specifically ask it to.

In a third person, graphically rendered game *Photopia*'s trick would be much harder to pull off. Character design would likely clue the player in on the solution in advance. The desire to show off a richness of visual representation would have to be curbed. This is not impossible by any means; *Metroid* managed to implicate many player-narrators into unreliability in the many cases where they had been assumed themselves to be telling the story of a male character.

Further complications and unreliability within the player-narrated world versus the author-implied one concern the existence of glitches and bad collision detection. A game such as *Big Rig Racers*, with an incomplete system missing basic governing rules, contains a lack of parity between the implied world of its designers and the integrity of the world as traversed by the player. The world is unreliable in and of itself. Glitch exploits, cheat codes, gamesharks, and tool assisted speedruns meanwhile are all tools whereby the player-narrator can undermine the world for their own purposes - rewriting the story as they see fit in complete disregard of authorial intent.

The hijacking of the narrative by an ostensibly narrating character is the closest many visual games truly get to unreliability. In *Bioshock* Atlas lies to the player, but the world they traverse never does. In some respect this makes Atlas an unreliable narrator within his own sphere, but his sphere does not encompass

the entirety of the game experience. From Greta Olson, "The reader judges the narrator's unreliability based on textual signals, and then moves beyond a literal reading of the text and attributes fallibility or untrustworthiness to the narrator. Suspending disbelief, the reader attributes personal qualities of fallibility and trust worthiness to narrators just as she makes attributions about individuals in other contexts."⁶

Portal's GLaDOS comes closer to being an unreliable narrator because she has control over the playable world; she is able to reshape and falsify both Chell's and the player's experience of movement through the space. Furthermore, the *portals* allow the player-narrator to subvert the mechanically narrated world of traditional FPS video game space and its assumptions of a certain kind of physical integrity, in addition to the false world of GLaDOS' test chambers. Both must be repurposed and recontextualised by the player, whose breaking of the normal laws of each room by use of the *portal* gun carries an implicit falsity, (along the same lines as GLaDOS' machinations), even as they perform the literal truth of what happens on the screen.

Fail-Safe, a parser-based IF by Jon Ingold, features both a lying protagonist, who narrates their own dire situation to you while omitting the key fact of their complicity, and an unreliable structure in the vein of *Photopia*. The set-up is that you are a radio operator receiving a distress call, which primes the player to offer assistance from the start.

Bzzt. Crackle. *Static*

"...hello? Hello? Can... me? .. Anyone! Hel.... Need..
hello?"

Bleep - PLEASE WAIT - Locating/Tuning signal...

..
“.. help. Repeat, can anybody hear me? Can you hear me? Hello..”

>>“Hello? Hello??”

>>hello

“Hello? Hello! The .. <crackle> pretty bad. Are you receiving this? Over.”

>>receiving

“Oh, thank God. Thank God.. ..emergency frequency.. We need help. This is the space pod ‘Serpentine’. We’ve been attacked, a small cruiser. They.. they came out of nowhere.. tried to board us.. ...stly dead.. systems are all messed up, we’re drifting.. I need help to fix this..”

“I’m by the console, there’s wires everywhere. The computer flashing something.
What do I do? Hello?”

Later, it is revealed that the game takes place in a wartime situation, and an attack is imminent, but this is not part of the initial setup. The player is primed to help the protagonist and fills in the blanks of their identity, assuming friendliness. Their identity is hard-coded in the game, but there are endings in which you will never discover it. Those in which you do save the reveal for the final sentence. What this means is that there are playthroughs possible where the player narrates a story entirely at odds with that of the implied author, even as it is fully allowed for by the actual author. We can see the author creating an ironic distance between the implied author, Ingold’s coded world-structure and the narrator, the player as they traverse that world.

Amsel Von Spreckelsen writes about games at madnessandplay.blogspot.ca.



ANYHOWLY ANYHOW

By Krish Raghav

‘Anyhow’ is my favourite Singaporean-English slang word.

It doesn’t parse easily into traditional English grammar. Sometimes it’s a verb, meaning “to potter about” or to kill time. Sometimes an adjective, meaning ‘unusual’ or ‘random’, and often it’s an adverb, written as ‘anyhowly’—meaning ‘reckless’ or ‘against the grain’.

Freighting a sentence with it can mask tone, to give it the appearance of gentle humour. It can indicate a winking display of disapproval that invites a closer look. It can signal exasperation, laced with sardonic self-deprecation. “It’s just anyhow talk”, you could say to deflect attention off something controversial. “Cannot anyhowly say what”, is the gloriously local way to abstain from a sensitive discussion. In other words,

it’s the perfect smokescreen for layered political discourse in a city that takes surface level meaning very seriously. It’s hard to think of a better word to describe *PAP 2048*, arguably Singapore’s first political videogame. It is ‘anyhow’ gamified: a work that exudes profound silliness while hinting at surprising depth. That masks political satire over breezy humour.

The game is a custom version of *2048*, which is a modified version of iOS puzzler *Threes*. In *Threes*, you combine numbers by moving tiles on a 4x4 grid. Tiles of the same number fold into each other to form a tile of the multiple— 2 and 2 make a 4. 4 and 4 make a 16. The goal of the game is to get a 2048 tile without running out of space. In *PAP 2048*, the tiles are replaced by pictures of Singapore politicians. Instead of combining numbers, you combine members of Singapore’s ruling People’s Action Party (PAP).

In a talk at the 2013 No Show Conference, game designer and critic Robert Yang mentions a mod for the game *Yakuza 5*:

“When you replace [Yakuza’s] main character model with a Japanese woman character model, the game becomes something much more political,” he says. “...A game about street harassment and revenge fantasy as you beat the shit out of every creepy guy who’s ever leered at you. This is especially poignant in a culture where groping and harassment on public transit was such a problem that they instituted women-only subway cars -- choosing to mod Yakuza 5, with its emphasis on physical contact, was not random. It was very important and intentional.”

Likewise, *PAP 2048* isn’t just an incidental editorial cartoon. Swapping *2048*’s numbers for pictures of Singapore politicians marks the game as a deliberate political statement – one that subverts the rules of the original to make a discursive point. As a player, the tiles we ‘combine’ in the game are now people literally consuming and being consumed. It’s a stark statement on the intensely hierarchical world of local politics, and the invisibility of those who occupy the lower rungs of the ladder.

It also represents a particular historical moment in Singaporean civil society activism, one marked by a diversity of tactics and irreverence towards the city-state’s founding myths, and the emergence of a powerful new discursive tool, videogames, for political argument. It also punctures a long-standing trade-off between the ruling party and the citizens of Singapore – an understanding that the party would deliver consistent economic performance, and in return define the boundaries of acceptable

political discourse. *Vanilla 2048* was a simple puzzle game about moving tiles, but *PAP 2048* is a satirical deconstruction of the ideology of Singapore’s ruling political party.

Where the PAP likes to think of itself as a true, horizontal meritocracy, *PAP 2048* interjects by pointing out the clear hierarchy in its ranks. Where the PAP likes to project itself as representative of the electorate, *PAP 2048* underscores the ridiculousness of that assertion. Only one woman – Tin Pei Ling – makes it to the game, and at the lowest level. For a proudly multicultural and multi-racial city, the PAP’s upper ranks also have poor minority representation. Roughly 74.2% of Singaporeans are of Chinese descent, but only one non-Chinese politician, deputy prime minister Tharman Shanmugaratnam (DPM Tharman), makes it to *PAP 2048*. Their inclusion is a disquieting reminder that Singapore’s ‘meritocracy’ only applies if you’re male, and not an ethnic minority.

It’s a widely unspoken belief in Singapore that DPM Tharman is the party’s best candidate for Prime Minister, but for another unspoken belief among the PAP elite that the city isn’t ‘ready’ for a non-Chinese PM. DPM Tharman occupies the 256 tile in *PAP 2048* – it’s a threshold point in the game, after which there’s a sharp spike in difficulty. After Tharman, the three remaining tiles are Singapore’s current and past Prime Ministers, and one is likely to get a portentous ‘Game Over’ screen in their attempts to ‘convert’ Tharman into one of them.

* * *

Singapore is ostensibly a Westminster-style democracy, but it’s effectively a one-party state.



Eight Left Wing Activists are released from detention, Singapore 1959

Since the first general elections in 1959, the People's Action Party, helmed by founding Prime Minister Lee Kuan Yew, has consistently held over 90% of seats in parliament. The PAP runs what's often called a 'paternalistic' state: a government very interested in the minutiae of people's lives, dictating their morals and values. Lee Kuan Yew, writing for the *Straits Times* in 1987: "I say without the slightest remorse, that we wouldn't be here, we would not have made economic progress, if we had not intervened on very personal matters - who your neighbour is, how you live, the noise you make, how you spit, or what language you use. We decide what is right. Never mind what the people think."

The unchallenged majority in parliament has also created a particular political economy, one that academic Kenneth Paul Tan summarizes as 'survivalist-developmental-neoliberal.' Unpopular policies, including forced evictions, liberal

immigration, and means-testing for welfare, were frequently pushed through for 'nation building' and 'economic development' reasons. Coupled with a persistent siege mentality, and the threat of a slippery slope ("a little red dot in a sea of green"), the 'politics' in the early political history of Singapore were effectively defanged. These weren't political acts, the argument goes, but 'hard truths'. There was no choice, no alternative but the PAP way.

Anyone who thought otherwise met the full force of Lee Kuan Yew's knuckle dusters. In July of 1961, the Barisan Sosialis, a left-leaning political party, split from the PAP. Two years later, a controversial raid known as Operation Coldstore saw Singapore's Internal Security Department arresting several members of the Barisan, putting them in indefinite detention and essentially eliminating the political competition to PAP rule. One member, Dr Chia Thye Poh, was imprisoned without trial for 23 years,

making him the world's second longest serving prisoner of conscience after Nelson Mandela.

In 1993, performance artist Joseph Ng infamously snipped his pubic hair in a series of public performances to draw attention to the country's criminalization of homosexuality. In response, both performance art and 'forum theatre' became ineligible for government funding, as 'spontaneous' art with no script and the possibility of audience interaction posed dangers to 'public order, security and decency.'

With a subservient state media and strong censorship controls, it wasn't till the broadband that a significant civil society could organize and coordinate. One of Singapore's earliest online political communities, Sintercom, came under the government's crosshairs in the late 1990s. Pressing the site to be officially registered as a news source, the rules would make site moderators personally liable for sensitive content posted by any Sintercom member. The site shut down soon after.

So the real power of Singapore's paternalistic government has evolved, to rigor, over brutality. Where one expects an authoritarian regime to be careless and somewhat incompetent, Singapore's technocratic state machinery hums with extraordinary efficiency. Activists have always had to rely on a diversity of tactics—to use emerging technology faster than its government could, and a thick layer of rhetorical and linguistic smokescreens – to anyhow without drawing attention. To conceal tone and intent.

The city's position as a global finance hub has created a nation of early adopters and trend

seekers, and these flows can't be dammed lest Singapore lose its competitive edge. The state has distanced itself from outright censorship or heavy-handed muzzling of dissent, instead relying on a system of economic incentives and ambiguous rhetoric to let people censor themselves. They have, for instance, long maintained that political critique was permissible, but 'demolishing respect for the government via systematic denigration' was not. The word 'constructive criticism' was often trotted out.

This is why a diversity of tactics was important. This is a city where forum posts on message boards are monitored, where screenplays and scripts are scrutinized (with a comprehensive blacklist), where edits to Wikipedia pages of Singapore leaders are met with calls for legal action, where even song titles for a proposed gig are double-checked (The Taiwanese pop artist A-mei was recently 'requested' not to perform her pro-LGBT rights song "Rainbow").

The predominant form of political expression, then, has had to keep shifting. First music in the late 1960s, then literature and theatre in the 70s and 80s, and then film in the 1990s – each major medium of discourse has been systematically strait-jacketed. The latest battlegrounds are online. The Internet was a freewheeling hotbed of political awakening, but a coordinated effort is being made to shackle it. The last two years have seen numerous cases of defamation suits and 'contempt of court' cases against bloggers, bought by politicians who felt their criticism went too far.

The 'anyhow' defence became standard practice – every incendiary statement qualified with a gentle retraction. Every serious critique mellowed

by self-deprecating humour. It's at this point that videogames, and *PAP 2048*, enter the picture.

Games are everywhere in Singapore pop culture. Take the subway during peak hours and you'll catch many a game of *Candy Crush Saga*. The opening moments of Valve's Free to Play documentary are set in one of the city's public libraries. The city is an outpost for many of the industry's AAA publishers - a part of *Assassin's Creed III* was developed at Ubisoft Singapore. EA's regional hub for the entire Asia-Pacific is based here.

A nascent developer community has been growing on the sidelines of these AAA industry outposts. But the Singapore 'scene' is more like a motley group of bedroom programmers and modders rather than the co-ordinated indie community we see in American cities. There aren't many examples of retail games to point to, but there are experiments and prototypes aplenty.

The honor of 'first political videogame' should have gone to a prototype for a *Civilization V* mod, which did the rounds on social networking sites a year before *PAP 2048*. You could now play as the 'Singapore civilization', the mod promised, with a delightfully clever systematization of the Singaporean worldview ("Cities do not rebel or revolt, roads/railways generate gold when a unit passes through and coastal tiles can be reclaimed into land tiles"). It was never released, and its development status is unknown.

PAP 2048 is significant because it's the start of videogames being responsive, and immediate and being deployed like memes and editorials and rallies for political discourse. For instance, the hierarchies of power reflected in the game are both intentional and responsive to news stories at the time. The first two tiles, and therefore most common, in the game are young PAP ministers Tin Pei Ling and Baey Yam Keng – both known to put their foot in mouth, appear in the wrong places and say the wrong things. Both are frequently criticized for being more concerned with their image than real issues.

The message board commentators that discovered *PAP 2048* caution against 'reading too much' into something merely playful, but that's where the intriguing possibilities of videogames as a discursive medium come to the fore. The political 'messages' of *PAP 2048* are coded as anyhow statements, and players connect the dots endogenously. Half the replies to any *PAP 2048* thread were suggestions for other political games that needed to be made.

In games, players can be co-authors of tone – they can use systematized rules to create satire, and to generate ridiculous situations. *PAP 2048* is often just that – ridiculous. But being ridiculous isn't a criticism. Because in Singapore, where satire is seen as destabilizing society, where ridicule is seen as undermining political capacity, and where poking fun at politicians is out-of-bounds, just anyhow is a matter of seriousness.

***Krish Raghav publishes a zine on Asian Gaming Histories called e:\>_.
You can submit to its first issue at krishcat.com/edrive.***

Gassh Choose Your Own Adventure Weirdd

By Stephen "thecatamites" Murphy



o all those interested in quality game-related content I would like to talk about an unfinished RPG Maker 2003 game which was released on the small forum saltworld.net by developer Ragnar three years ago. It is a goofy, little thing, compiling what exists of the author's agreeably amateurish 2004 attempt at making a top-down RPG. In the forum post he claims to have abandoned it for being "too Earthbound-y" but to me it feels more like an early-00's sprite comic in sensibilities: that same jokey irreverence married to a more earnest and conventional underlying epic plot structure, like a fantasy novel filled in with mad libs. So the main character lives in a toaster on the moon and the villain is called Nerdy Guy, but there are also pretty straight takes on the generic RPG village and castle that you can walk around and an elaborate Dragon Quest-style menu system overlaying it all. It is more unusual in the extent to which it is very obviously unfinished. The areas are mostly unpopulated, disconnected from each other: you can get to some of them only by stepping on what I presume are development debugging shortcuts in the first area that weren't taken out before release. The castle section in particular is eerie, drifting in a UFO through a symmetrical grid of long, empty, carpeted halls. Another one of the shortcuts drops you into an ocean and the game ends there - unless you've opened the project file in the RM2k3 editor and are playing through that, in which case you can turn on noclip by holding CTRL and float across the water to explore a village nearby. It's a scrappiness that pervades the whole game: there are hidden variables you have to manually turn on to be able to talk to anybody, most of the doors can't be opened, most of the text is placeholder. The areas are less environments

than conventions which have been bleached of the content we're accustomed to extracting from them and which are hence oddly forlorn.

So it's a mysterious game which is also generic but it's also a game that's mysterious because it's generic, because the generic is itself mysterious: something both abstract and obtrusively material, at once the most ostensibly meaningless part of a work and the part most immediately perceived. What material is present in *GCYOAW* can for the most part be found in a hundred other titles but in those it would be a minor, conventional component of the whole: here it's all there is, and the shift in emphasis estranges us from it. In this way *GCYOAW* would, taken by itself, be an interesting, slightly haunting index of chopped-up genre signifiers and cargo-cult-ish alienation of form from context. But where I think it gets more interesting is looking at *GCYOAW* not just in comparison with commercial Japanese RPG mainstays but also with other homebrew videogames of the same era, ones which used a similar set of techniques and limitations with the same reference points in mind and which themselves had a complicated relationship with genre and fragmented form. *Gassy Choose Your Own Adventure Weirdo* is notable in how it simultaneously both typifies and complicates conventions of the scene from which it emerged, and examining this means looking at it not just as a game, but as an RPG Maker game.

WHAT IS RPG MAKER GAME: RPG Maker is an engine but it's also the set of practices which evolve in the usage of that engine and a community where those practices are taught and where they're assigned value, and I think it's worth talking about not just in reference to this

game but also as an example of how these three elements can feed into and modify each other.

RPG Maker is an easy-to-use engine for making 2D, top-down jRPGs. It consists of a lot of fixed, standard systems from the genre but the appeal is in being able to control the context in which they occur, to create the areas and write dialogue and choose characters and make enemies and items - or more specifically I'd say the appeal is the sense of possibility implied by being able to do all of this, and the image of personalised adventures rolling out without end. The splash screen for all of the programs is some variation on an image of typical RPG classes or characters - warrior, magic girl, monster person, etc - drawn as anime characters and obviously in the middle of some kind of exciting exploration, standing on a rock looking at maps or in the crow's nest of a ship that's heading towards the viewer. Starting a new project immediately generates an empty field of grass or water, ready to be turned into a new area or populated with a cast of stock character sprites. But even though it's the first gamemaking engine I've used, it still feels stiffer and more jarring than I expect it to, and I think that's because of the segmented workflow it involves.

The engine consists of: a database storing character, enemy, weapon and attack information; an easy-to-use tile-based map editor; an "events" system of mostly simple, prefab script events which can be triggered from the map (step on plate to cue dialogue, etc); and a built-in turn-based battle system in the vein of Final Fantasy. It all comes with a large selection of default resources, like character sprites and music and sound effects, that you can swap around or play

with (try playing Horse.WAV on the lowest speed!). The database contains the meta-system stuff, while the map and event systems decide when & how that comes into play. The map and event systems are quick and easy to do in broad strokes while the supporting database is more granular, number-focused, exhaustive, and I think this is important for understanding what the engine is trying to do, what kind of games it's designed to build. The database is also very skewed towards building longform games: the version I used contained 14 default starting characters, each with a minimum level of 1 and maximum level of 99, as well as over 100 monster types ranging from Green Slime (56 HP) to Quetzalcoatl(!) (33333 HP). Trying to reverse-engineer an "ideal" RM game from all this makes me think of an RPG which is long but also vague, with endless large, undistinguished areas acting as a set of stages for the default systems to gradually resolve themselves over. And what's interesting about this is that these games ended up being the opposite of those that the RPG Maker community, or at least the one I've had experience of, sought to make.

What is that community. For the purposes of this essay it's an amalgamation of GamingW.net circa 2004-2008, RPGMaker.net, RPG Revolution, specifically english-speaking forums with a particular focus on the 2000 and 2003 versions of RPG Maker. RM2k/3 differ from other versions in that 1. the english edition is a pirated, illegally translated one, and hence has no official or centralised support network 2. the lower resolution means that it supports mixing ripped 16-bit commercial game sprites with the free default assets 3. the lack of an additional scripting option (along the lines of Ruby for

RMXP/VX) leads to a necessity for folk-method workarounds. All of these factors led to the creation of RM sites which would specifically exist to offer these resources and support but I think another, harder to define, factor is the very desire to expand upon the capacities of RM in the first place, which I believe is partly due to the ways that the aforementioned “vagueness” of the engine contrasts with the characteristics of the genre it was built to replicate: its detail, enveloping aura, sense of place. RPG Maker was not just designed to make RPGs: it was built to emulate Japanese RPGs of a particular type, from the character sprites to the battle system, but turning that type into a set of generic signifiers to be combined arbitrarily in prefab form means necessarily losing some of the richness which is as much a part of the appeal as the fantasy setting. Was it a specific desire for genre fidelity that led people to counter the vagueness of RM with elaborately customised day/night systems (*GCYOAW* has one) and *Legends of Rudra* rips? Or was this process just a reflection of how artistic works are frequently seen as dubious or invalid if they don’t conceal the methods by which their effects were produced?

An important part of how the RM community legitimised their own work lay in establishing an image of the “generic” RM game, a baseline which other works could be compared against, a supposedly default model which would then be chopped Big Daddy Roth style into something inventive, flashy, personalised. New demos being posted would be castigated in inverse relation to the extent that they visibly modified the system, used new graphics and more elaborate script workarounds to apply an individuated sense of texture to the RM frame. But the games

being produced were still, nigh-uniformly, RPGs: the modifications to the RM2k/3 default rarely went to the level of changing genre or overall structure or even length. So the map component was overhauled while the database was not, reflecting an emphasis on the affects of the genre rather than the mechanical basis for it, although the results still benefitted from the embedded notions of progression that the latter involved: there always remained a clear, implicit line from fighting hedgehogs in the first area of a highly polished videogame to fighting demons in the last area of that same highly polished videogame, even if the latter did not exist. In essence the sense of abstract possibility that the engine as a whole was based around became integral as well to the games that were produced. RPG Maker games became miniature versions of RPG Maker, offering an abstracted and stylised vision of escape and possibility above and beyond anything that was actually present in the games themselves. And this idea of the internalised, imagined generic was also mirrored in the practices of the community that I find most interesting and most relevant for trying to talk about *GCYOAW*.

The practices I mean are ones which are ticklish to write about because they are only furtively acknowledged within the communities themselves. I picked up RM2k3 in my teens and had been playing around with it a while before I’d sought out any of the communities around the engine, any of the other games people had made with it. The first one I found was called “Devil Hunter: Seeker of Power”, and my experience with it went through three stages, each immediately following the next:

1. *Playing it, from the start, for 5-10 minutes*

2. *Opening the game in the RM editor and poking through events, dialogue and maps to try and construct a sense of what the game was or was trying to be without actually playing the 6-8 hours of it*

3. *Opening the resource folder and stealing all the monster graphics.*

This is the process I lapsed into unconsciously whenever I played RM games and it still seems mysteriously indicative to me of the way games were played in that culture: automatically cross-sectioning a genre experience out into signifying fragments that were experienced half-straight, half-skimmed through, guessing at a whole and then stripping it down to components. And this is ultimately what still interests me in RPG Maker, the idea that it fosters if not encourages this kind of strange, slanted playing, of playing without being the Player that the design supposes and builds around. Was this specific way of playing widespread? If it wasn't endemic to the communities I've mentioned I do think it was at least an occasional thread in them, something acknowledged clandestinely, as a guilty secret: why people who made original graphics complained of having them immediately stolen and reused, why some people went through lengths to package their game in an installer rather than the default export, why something as specific as "Legend of Rudra tileset rips" could become so immediately widespread following their use in the game Balmung Cycle (and Devil Hunter before that), why people would occasionally have maps spelling out "DONT READ" or a smiley face in landscape tiles at the top level of their map structure

where nobody but other developers would see.

But even aside from a concrete approach I think there's something in this practice - of downloading generic titles, breaking them down into a set of actual situations and elements, and then absorbing the parts - that reflects the mindset of the RM community. I think what's being sought here is that same sense of unformed, inchoate possibility that was central to the engine in the first place, something which cannot be supported for long by the closed nature of a finished work, which is therefore broken back into sufficiently evocative fragments as a result. It's an attitude fostered by the overwhelming time demands involved in making a "full-length" RPG but also by the frequent lack of feedback (or attention) from outside players who are not themselves RM developers. Most RM games never get past a "demo", or early build with the edges cauterised. The forums have screenshot threads and mapping contests featuring the most exciting glimpses of games which will usually never exist in a finished state. There is an internally remarked-upon cult of fragments in the forums, due I think to an enhanced and pervasive awareness that a term like "promising" is not always just a backhanded compliment, but a positive quality in its own right. In a community where long, elaborate games are produced without a playerbase to support them, before an audience used to treating elements of a game less as things in their own right than as readymade signifiers for a certain type of experience, "promising" is in essence the only metric of value, and RPG Maker development forums became miniature research stations into the immaterial aspects of videogames, into the image of a play experience supported by mechanical and graphical elements

but not generated by it, a ghostly overlay. It's impossible to imagine games being played in good faith in this context: easier to think that the supposed player who would actually do so is itself a necessary fiction. I think these conditions frequently lead to self-referentiality: "The sense that there was no one much to read the work these writers were producing ate its way into the tone and structure of the work itself," as Colm Tóibín noted of the culturally isolated, fragmentary writers Flann O'Brien, Jorge Luis Borges and Fernando Pessoa.

I think my fascination with *Gassy Choose Your Own Adventure Weirdo* lies in the way it, intentions aside, ends up foregrounding this sense of a gulf where the player should be, in a way which doesn't resolve that gulf or use it as an excuse for insular clubbiness. It treats the RM community's dual awareness of supposedly autonomous fictions and the communal components that generate them with a gentle curiosity that the fictions themselves, steeped in the monumentalism of commercial culture, cannot admit. In a sense *GCYOAW* is the negative mirror of the homebrew approaches mentioned above, because it's too abstract and broken up to admit of any sense of imagined protean potential: your attention becomes focused on what's in the game simply because there isn't anything else. The bones of genre convention are still present but out of sequence, lying around. You can walk around and pick them up but not truly build them back into whatever they were meant to represent, and the game gives you no reasons you might or might not want to do this anyway. If this description sounds like it involves a deep alienation from this genre structure I think that's correct, but I also think there's a more

complex dynamic at work in which these genre structures are rehabilitated to the degree that they ARE fragments, empty signifiers. There is something plaintive about the empty castle corridors, and the empty forest outside them. I'm thinking about the game but also empty water maps in project files, notes buried in a database, teenagers building elaborate fake towns in emulation of the elaborate fake towns in Squaresoft games as consumed by those same teenagers, the entire, exhausting Rube Goldberg machinery of fiction by which a sense of place or direction can be momentarily cranked out even if in a void. The dopey, goofy elements of *GCYOAW* are part of this tradition but in leaving them open, incohesive, unprotected, the unfinished nature of the game goes beyond that, seeming to address not just an imagined Tulpa of a player but a whole imagined culture, equally inconceivable and lost, being dutifully summoned via the format of video game as necessary excuse to draw things on a computer all day. *GCYOAW* plays on the RM community's fascination with incomplete genre works, but instead of valorising an unlimited imaginary potential it doubles back to use incompleteness as an image of the concrete, a way to project these imagined works back into material life. Towns with no people. Suitcase convention.

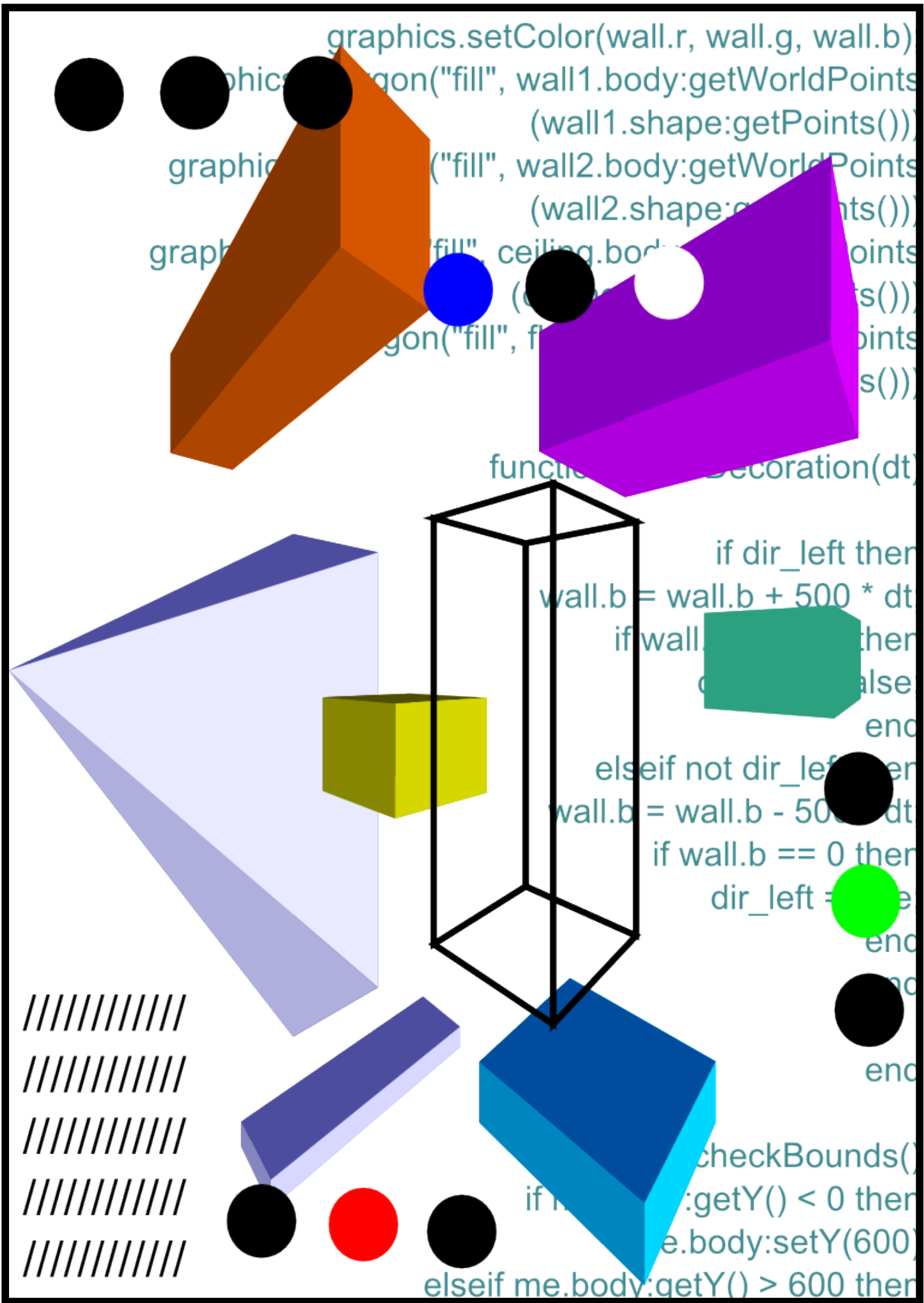
Gassy Choose Your Own Adventure Weirdo was posted onto an abandoned ghost-town schism forum of gamingw.net and got 0 replies, which maybe explains some of the Ishmael-ish "and I alone am escaped alive to tell thee" vibe I get from it, but I think part of it too is the feeling that this game was somehow part of a tradition that never happened, the lost avant-garde of

RPG Maker where the process of eliding gameplay while still experiencing it became aestheticised as something worthy of exploration instead of swept under the rug. It is also part of an antithetical tradition within RM games. Developer Ragnar went on to work on the similarly Earthbound-esque “Homeland”, which was (alongside Brandon Abley games like “Wilfred the Hero” and “Sunset over Imdahl”) one of the most visible games to break from RM tradition with unorthodox settings and custom resources and which was a precursor for games like “Ghosts of Aliens”, “Space Funeral”, “OFF”, and “Bat Castle”. These titles, along with “Middens”, “Wither”, “Pom gets Wi-Fi”, and the horror games mentioned in AR#2, used RPG Maker but had sensibilities more prevalent in the outside homebrew gaming world than within the RM community: And one of these sensibilities was a more direct attitude towards design, where the audience was acknowledged and courted as autonomous internet browsers choosing titles on the basis of visual aesthetic and humour rather than as hypothetical contemporised versions of the same 14-year-old with a Super Nintendo and 3 games that Square-Enix titles were made for. I think this change in audience and values led to games which were more playable than RM games traditionally were but I think it also meant breaking irreparably with what made those games charming, which was the sense of cultural practices replicated incomprehensibly before a void, less important designed experiences than a kind of furiously onanistic praxis done obscurely. This is the feeling that *GCYOAW* dramatises, for me, and it’s why I still think of it as epitomising the scene: even or especially as nobody played it.

*Stephen Murphy is the creator of **Space Funeral**, **Lake of Roaches**, and other freeware titles. His latest compilation, **50 Short Games**, can be bought at harmonyzone.org/50SHORTGAMES.*

Glitches: A Kind of History

By Alex Pieschel



Google “*history of videogame glitches*” and you will cue a chorus of lists:

- 6 HILARIOUS VIDEO GAME GLITCHES THAT YOU HAVE TO SEE TO BELIEVE
- THE 22 MOST HORRIFYING VIDEO GAME GLITCHES
- 6 GLITCHES THAT ACCIDENTALLY INVENTED MODERN GAMING
- TOP 25 HOLY SHIT GAMING GLITCHES OF ALL TIME

You will not, however, locate many attempts to consider the context or origin of glitches. I agree with the claim that they are horrifying and hilarious, and also that they invented videogames. Glitches both predate and predict videogames, and in many ways they have allowed digital games to become something other than their analogue counterparts superimposed onto a computer. But there are also many cultural movements that shaped a glitch aesthetic before digital games were invented. “Glitch” refers both to unintended consequences and also to effects deliberately designed to make an audience question whether or not the software is working as intended. I think it will also be helpful to consider the glitch in terms of three separate but related forms: 1) glitch as discovery, 2) glitch as aesthetic, and 3) glitch as performance.¹

* * *

When I was in fifth or sixth grade, I had a friend who would call me up in the evenings just to lie about the first generation Pokémon universe. I was always bitterly disappointed when I discovered that the cryptic environments he described didn’t actually exist in game, and I

suspect my disappointment at the unreality of his inventions was the part of the ritual he most enjoyed. He would give deliberate instructions over the phone while I, gameboy in hand, would try to direct my avatar in some certain pattern that would lead to some certain secret area. I believed him because I wanted the stories to be true. For some reason the game’s fiction was not enough for me. I wanted some forbidden shadow simulation to exist alongside the designed experience that had been carefully prepared for my consumption. One of the glitches he spoke of, called MissingNo., turned out to be real.²

MissingNo. was a jumble of pixels in the shape of a backwards ‘L’, its name a signifier of absence. It didn’t have any cute animal-monster art attached. It was an outcast you could summon by performing a series of steps: talk to OLD MAN; fly to Cinnabar Island; surf the coast. You could use MissingNo. to level up your pokémon without having to button-mash through endless battles. The glitch’s only drawback was that it carried the ambiguous potential to corrupt your save file. Probably for this reason, fan fiction writers often place it in the horror genre, as some seething spirit that will eventually escape its technological constraints, like the videotape in *The Ring* or the floppy diskette in *Smile Dog*. MissingNo. is imagined as horror even though it allows you to assert dominance over the game world, circumventing the tedium of the ‘complete’ experience implied. This is because MissingNo. can be predictably obtained, but not predictably controlled. Like a virus, it creates instability. On the surface, this is what makes MissingNo. feel *wrong*, but also wrapped up in its imagining is a sense of perverse shame. Players who use the glitch feel that they have

corrupted the sanctity of the game world and unleashed some horrible ghost plague just to get ahead. MissingNo. is a machine subconscious that threatens to reveal to us the garbage entrails of our consumer culture. MissingNo. asks the hard questions of art and politics: To what extent does artistic appropriation for the purposes of critique actually achieve anything? To what extent does formal deconstruction actually say anything? To what extent does art actually do anything? Why are we asking art to do anything in the first place? Perhaps MissingNo. has neither the time nor inclination for art or existential questions. In trying to figure out what we can do with a glitch or what we can make out of it, things begin to unravel.³

Based on my own amateur non-programming perspective, i.e. my experience of many years staring at the effects of code while remaining ignorant of its alien language, not to mention my piecemeal research methodology of cobbling together what people on internet forums seem to think words mean, there is currently no real consensus on the difference between the terms “glitch” and “bug.” In general internet nomenclature, both words refer to errors that work against authorial intent, but “bug” is often cast as the weightier and more blameworthy pejorative, while “glitch” suggests something more mysterious and unknowable inflicted by surprise inputs or stuff outside the realm of code. Often the terms are used interchangeably.

Because why not, let’s trace the word “bug” back to its obsolete fifteenth century definition: “An object of terror, usually an imaginary one; a bugbear, hobgoblin, bogey; a scarecrow.”⁴ Later, we discover that bug can also mean a disease

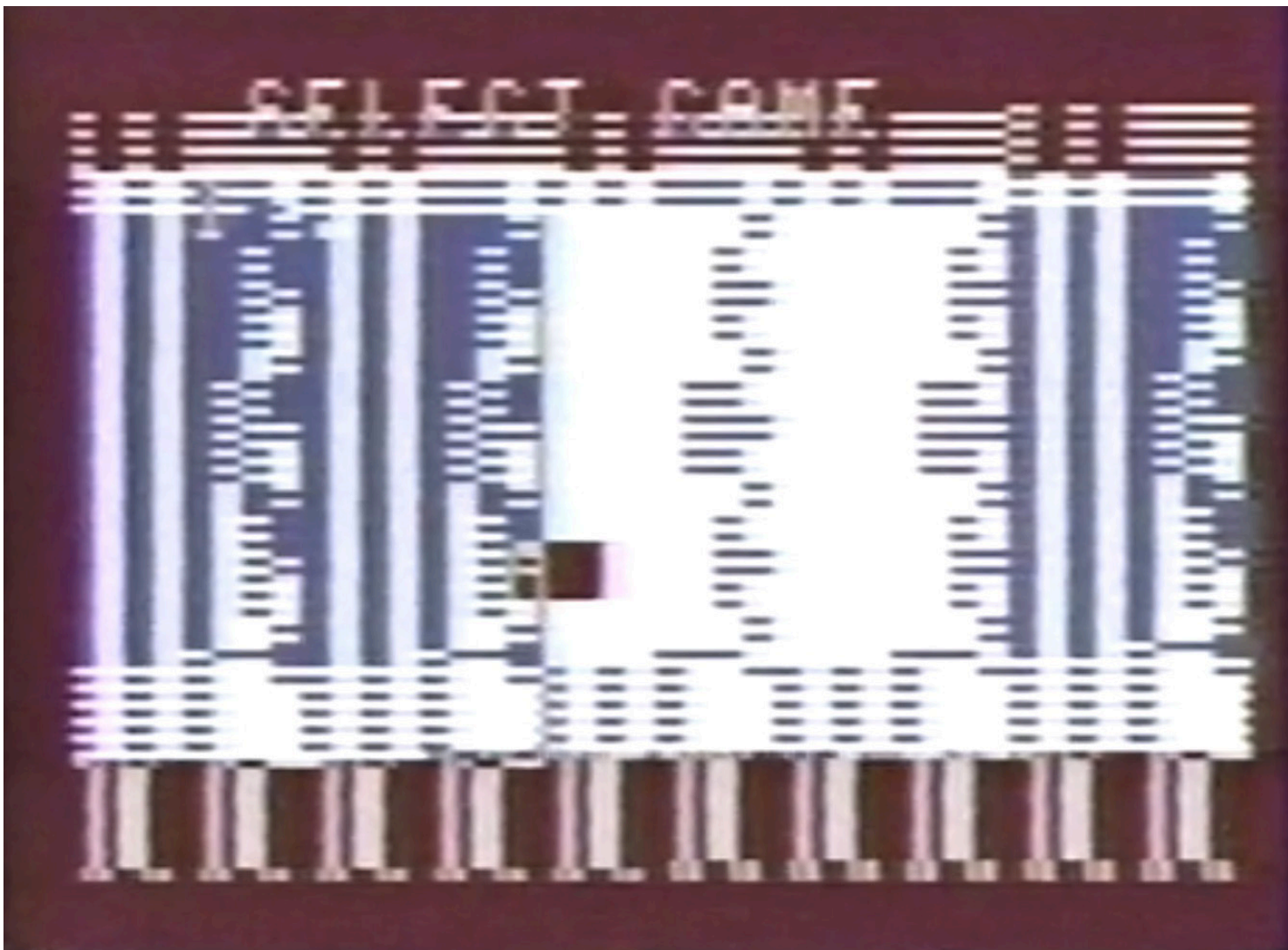
or a concealed microphone. In mid-twentieth century computer terminology, “bug” begins to imply something that can be reliably diagnosed and fixed, which I assume must be why we say “debug” and not “deglitch.” Though it retains many of the negative connotations of “bug,” glitch also has come to imply something more transient, abnormal, illogical, impermanent, or unreliable, experienced in its immediacy and then lost, like divine visitation or natural disaster. Bug implies some mundane mistake that we can blame on the person who wrote the code, while the perp is harder to pinpoint when it comes to glitches - could be hardware, could be users, could be ghosts. The most useful distinction I have found emphasizes the way each is experienced: bugs are sought out and corrected by programmers (authors), while glitches are experienced or exploited by players (audience).⁵

“Glitch” was first used as astronaut slang to describe an overload in voltage in 1962. This definition is apt because many of the behaviors and aesthetics of early videogames would be determined by hardware limitations and their potential for overload. Tomohiro Nishikado, designer of the arcade game *Space Invaders* (1978), wanted players to have to shoot down exactly twenty-five aliens marching back and forth across the screen, but this number was more than the fledgling hardware could reliably process. As a result, the aliens moved more slowly than intended. But Nishikado would soon discover that with every dispatched alien, the hardware’s burden was reduced, and the speed of the aliens increased. Nishikado determined that this scaling difficulty made the game more interesting, so he stopped trying to fix the bug.⁶

A year later, Atari released a game called *Adventure* for its 2600 console. A young fan of the game wrote a letter to Atari describing a flashing signature embedded in a secret room and unwittingly provided the first documented discovery of an easter egg. *Adventure*, and many other console games of the time, carried a glitch that caused sprites to flicker when too many objects appeared on the screen. In *Adventure*, the sprite flickering glitch could be manipulated to reveal the signature of Warren Robinett, the game's designer and programmer who had become frustrated with Atari's refusal to credit his work. Another unlikely marriage of limited hardware and ambitious design, Robinett's signature is significant because it combined an accidental effect with an authored intrusion into the game world.⁷ Robinett wanted to achieve a deliberate aesthetic effect, and he chose to embed this effect in one of the game's "mistakes." This way, his claim of authorship would be hidden from his bosses but discovered by persistent players. Whereas the *Space Invaders* bug was sold as the 'correct' version of the game, the *Adventure* glitch was harnessed as an act of subversion against an exploitative company. The idea of a secret signature was later co-opted and branded by Atari to serve a marketing stunt.⁸ Now, games regularly sell the promise of easter eggs. As Atari fell apart over the next few years, Nintendo would stake its claim on both Japanese and North American markets. *Super Mario Bros.*' Minus World glitch (a hidden, infinitely looping level) would become one of the more famous glitches of the 1980s, and *Pokémon's* MissingNo. would become the latest in 1990s schoolyard gossip. The glitch had developed from a happy accident to a mythological error to be studied, pursued, and dissected.⁹

For precursors to a glitch aesthetic we can look to the turn of the twentieth century, when expressionism began to establish itself as both reaction against realistic representation and ongoing experiment in form. *The Cabinet of Dr. Cagliari* (1920), a German Expressionist silent horror film directed by Robert Wiene, uses ambiguous angular geometry and shadows drawn directly onto the set to achieve a kind of alien consistency, unsettling the viewer. Similarly, many surrealist paintings show subjects placed in environments that look like no conceivable ecosystem: endless empty deserts, hallways, and corridors. Surrealist works often break down the separation between foregrounded agent and static inanimate backdrop so that these seem composed of the same elements. Dorothea Tanning's *Eine Kleine Nachtmusik* (1943) shows two disheveled girls in a vaguely sinister, decaying hallway, one standing, one leaning against the wall. A broken sunflower about the same size as the girls lies on the red, carpeted floor. The hair of the girl in the foreground, facing away from the viewer, is standing straight up, and the material of her dark green hair looks as if it could be made out of cracks in the paint on the wall or just as easily out of pieces of the flower's broken stem. Upon closer inspection, the flat skull of the girl in the background seems to suggest that she is a very lifelike, life-sized doll. There is an unsettling sense of transience and transformation of materials, where the world flattens out and no part of the image can be held and examined with any certainty, like in anxious dreams where you can't seem to place yourself.

Unsettling, transient, and misplaced, glitches



Jamie Faye Fenton, *Digital TV Dinner*, 1979

tend to fragment perspective. The cubists had a similar interest in dismantling the reliable image. Lyubov Popova's *Portrait of a Philosopher* (1915) looks like it's been chopped up and rearranged into competing perspectives. The work hints at a coherent, human personality, but both foreground and background are fragmented, placed on equal footing, like a digital image file being compressed for transfer. The futurist paintings of Luigi Russolo are similarly fragmented, but here the fragments serve an illusion of motion. The urban settings of Russolo's paintings feature intense, arrow-shaped streaks that either point in a single direction or aim to converge upon a single point. *The Revolt* (1911), *Music* (1912), and *Dynamism of a Car* (1913) endorse technology with a fervor of bright reds and yellows, deep blues and greens, a palette that foreshadows the data-banded image files of the internet age. Russolo also wrote a

manifesto in 1913 called "The Art of Noise," (a foundational text for what would later become glitch music) which argued that noise, the disparate sounds that formed the background of modern industrial life, needed to be collected and appropriated in music. Dada, a radical leftist avant-garde movement also interested in appropriating noise, was less interested in turning noise into something coherent and palatable. A kind of anti-art, dada advocated the interrogation of systems and structures rather than submission to authoritative meaning. *Silence* (1915) by Georges Ribemont-Dessaignes shares some of the futurists' imagery of industry and technology, but is less enthusiastic about the politics implied: cogs placed piecemeal, purposeless metal teeth, an aimless, sinister machine questions the "progress" of industry. Towards the middle of the twentieth century, Abstract Expressionism used fragments

to emphasize process over product. Works like Joan Mitchell's *Untitled* (1943) and Jackson Pollock's *Mural* (1951) aspire to an organic transparency, revealed through soaking, dripping patterns that imply deliberation tempered with chance.¹⁰

As these movements set an aesthetic foundation of instability and fragmentation, other twentieth-century artists were becoming interested in using technology against itself to create effects that hadn't been anticipated by the hardware designers. Len Lye made *A Colour Box* (1935) by drawing "directly onto celluloid" and setting to music the resulting animations, some of which look like what I imagine you might see if you moved cells around under a microscope. Lye used the camera only to show introductory cue cards. Nam June Paik performed *Magnet TV* (1965) by displaying a TV with a magnet on top of it (The instructions that came with a new TV set in 1965 probably forbade this behavior). The magnetism caused the screen to display cerulean wispy patterns that make the standard set look pretty drab by comparison. As some early game glitches were being discovered in 1979, *Digital TV Dinner* used the Bally Astrocade, a second generation videogame console, for a visual arts project. The Bally Astrocade was designed to allow players to switch game cartridges while the power was still on. Resetting while switching cartridges caused strange memory-dump animations to occur. The voiceover from the video describes the process as follows:

"This piece represents the absolute cheapest one can go in home computer art. This involves taking a \$300 videogame system and pounding it with your fist so the cartridge pops out while it's trying to write the menu. The music is done by Dick Ainsworth with the same system, but pounding it with your fingers instead of your fist."

The results of all this tech mangling are strangely soothing, a nice mix of buzzing static, horizontal lines, interspersing earthy and airy hues.

This expanding culture of artistic misuse influenced a movement called "*net.art*." Enabled by the increasing availability of the internet in the 90s, net.art was a precursor to what would later become glitch art in the 2000s. In the mid-nineties, artists Joan Heemskerk and Dirk Paesmans (the latter of whom had studied under Nam June Paik) moved to California and formed the art collective JODI and produced some of the foundational work that would later be described as net.art. JODI's early work mostly dealt with distorting the layout and usability of their website so that it displayed strange patterns, error messages, or underlying code. During this time, they received a lot of emails that tried to explain to them how to correctly format their website. In the late 1990s, JODI began working on a mod for *Quake* called *Untitled Game*, which they would release in 2001.¹¹

The *Untitled Game* proper is made up of fourteen separate total conversion mods, each with its own individual aesthetic. In many ways, reading Lisa Adang's forty-something page analysis of *Untitled Game* was more interesting to me than experiencing the work itself. Unlike most writing about games (including anything I have ever written), Adang's analysis combines personal reflection on the aesthetic experience of *UG* with meticulous formal excavation of its code. When actually playing *Untitled Game*, you feel very unsure of what is happening or how you are affecting the action. Your perspective has been

reduced to swirling black and white lines, or mangled polygons, or decontextualized slices of environment. The sound effects inform you that most of the controls from *Quake* remain intact (press space to hear a grunt that indicates a jump; left click to hear your shotgun blast). Adang's analysis reveals that a coherent 3D space is running in the background, which means that JODI did not simply chop up or reduce *Quake*'s code so that it doesn't function correctly. Instead, they altered the player's view of 3D so that the player is forced to scrutinize their interaction with the work. Much of this is not readily apparent to the player. *Untitled Game* suggests, as does a lot of early net.art, a tension between implicit critique of its own medium and fascination with, sometimes fetishizing of, the same. I think this is what makes some net.art works feel distant, self-reflexive, or somewhat insular.¹² The unintuitive practices involved require an impressive devotion to the tech, even as they require a desire to overturn the tech and expose what's hidden beneath the sleek user interface. Interactivity is assumed as inherent in these works, but what is supposed to feel interactive is undermined when signals don't work in the way an audience expects them to. Hence JODI's working towards a deliberate aesthetic of error only to receive emails that politely point out to them the brokenness of their website. JODI and other net.artists' explorations of these tensions influenced visual noise and distortion practices (like databending and datamoshing) that would gain more traction in the early 2000s.¹³

The first glitch convention was held in Oslo in 2002. In 2004, Iman Moradi submitted a dissertation to The University of Huddersfield called "Glitch Aesthetics." Moradi's paper

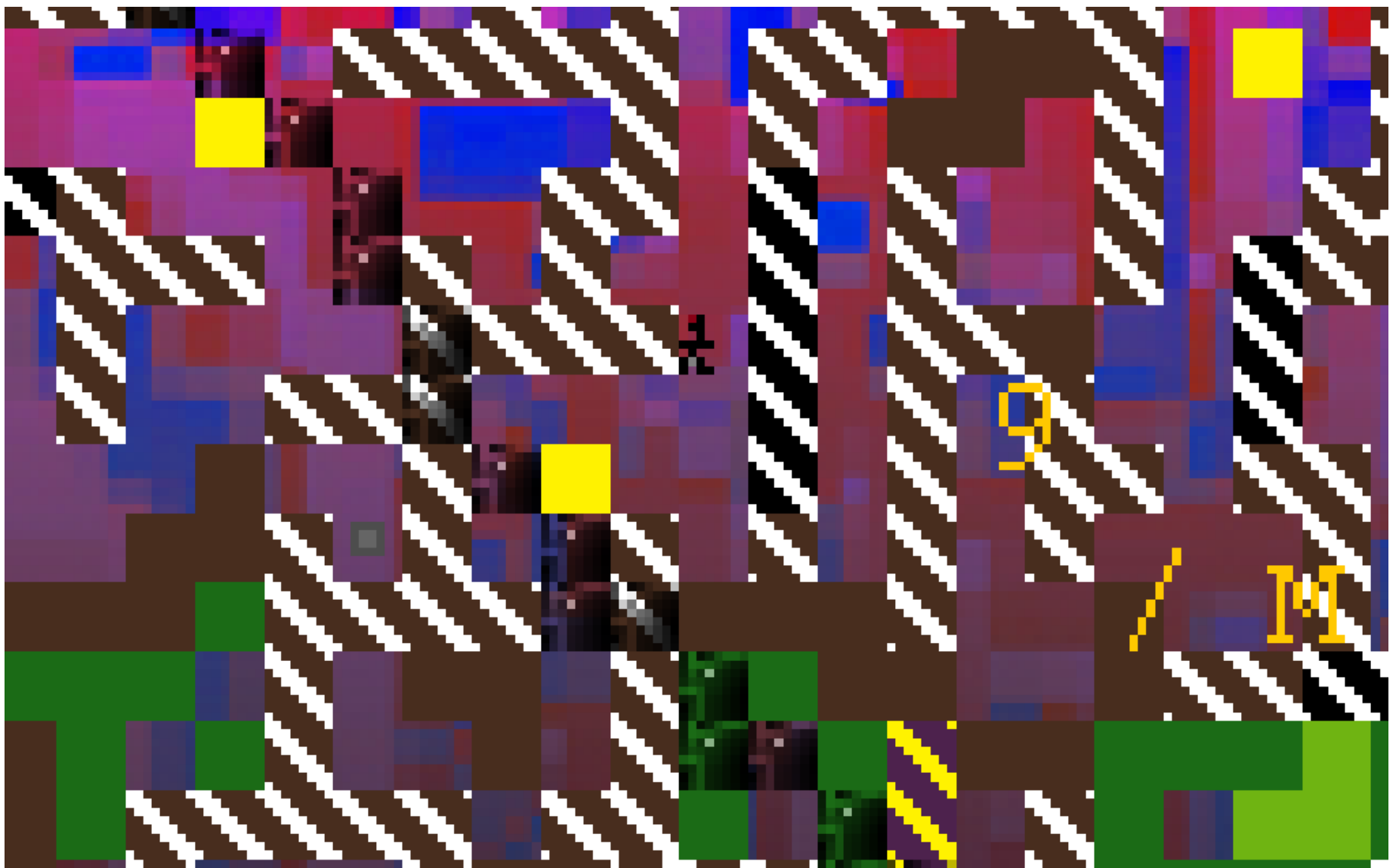
catalogued some of the artists whose work he saw as important (Angela Lorenz, Dimitre Lima, Tony Scott) and defined an aesthetic that emphasized fragmentation, linearity, and repetition. Moradi also differentiated between "pure glitches" that occurred in the wild and "glitch-alikes" that were manufactured by the artist. In 2009 Rosa Menkman, influenced by JODI's work, wrote and performed a "Glitch Studies Manifesto" in which she argues,

"The user has to realize that improving is nothing more than a proprietary protocol, a deluded consumer myth about a progression towards a holy grail of perfection" and "what was once understood as a glitch has now become a new commodity."

By the 2010s, the glitch aesthetic had been widely appropriated in pop culture in nearly every conceivable form: movies, music videos, advertisements, and of course videogames. By this point, glitch art was still niche, but glitch aesthetic had become ubiquitous.

* * *

My initial impression of Michael Brough's *Corrypt* (2012) was the staccato sensation of playing a polished block-pushing puzzle, but there was something else there. The world's art and sound, riddled with calm, mysterious reverberations, seemed to suggest some breakdown in the surface experience. And even the early, relatively simple puzzles, in which blocks amusingly stick together, seem to hint at the potential for doing some irreparable damage and getting yourself stuck. Eventually, progress in *Corrypt* begins to feel intoxicating as you discover that the game is letting you break it. In fact, you must break it in order to progress, but it's easy to overextend yourself and exhaust your options. Everything



Liz Ryerson, *Problem Attic*, 2013

about the world, upon first inspection, seems so peaceful that what you end up doing in the game feels intrusive.¹⁴ As player, you invite chaos to craft a more interesting experience. Similarly, in Liz Ryerson's *Problem Attic* (2013) the most consistent thing about the environment is how it breaks down and demands that you interrogate it.¹⁵ Like *Corrypt*, *Attic* makes you wonder if you have broken something and in doing so squandered your chance for progress. But you persist, because any stability you find seems illusory anyway. In *Corrypt* it felt like you were invading, but in *Attic* it is the system that feels invasive. Obstructing you are transient boundaries and gendered iconography, but also the limiting immediacy of your own perception. The game eventually gives you the power to clip through walls. The nature of this power changes as you progress further as some rules change and others stay the same.

Perhaps you are working in tandem with this world to create instability. The world is shaky, sometimes oppressive, but this is not the limit of the game's emotional register. There are moments when you feel powerful. Sometimes gravity lifts, your movements feel deliberate, even comfortable, cavernous synths swell. This seems contradictory, but the game is consistent in terms of what it asks of you, even though you are working against a hostile force that keeps changing. The experience of *Attic* is ambiguous, but not entirely abstract. It's intellectually and emotionally taxing, but it gives you something you didn't have before. In some ways, the glitch presence here feels like the most antagonistic part of the game, but also one of the most useful tools at your disposal. Here, a glitch aesthetic is incorporated as a means to an end. Both *Attic* and *Corrypt* are less performances of meta-reflection on artistic process, more deliberate

sensations conceptualized, crafted for humans.¹⁶

Become a Great Artist in Just 10 Seconds, by Andi McClure and Michael Brough, is a tool for making glitch art developed for the Ludum Dare game jam in August 2013. The program allows you to alter a picture or blank canvas beyond recognition. Each key on your keyboard corresponds to a different visual and sound effect. The results look similar to when glitch artists databend, or manipulate the raw data of an image file using a hex editor, but here feedback is immediate. *Great Artist* includes a freeform sketch mode but also more game-ish modes, called “exams,” that give you assignments such as ‘draw this still life of sliced tomatoes in six seconds or less’. The game modes are presented as instructional (“How to Draw a Landscape”), but they simply place your canvas next to the painting you are supposed to emulate, and the similarity of this painting to your own is monitored by an exact numerical percentage. You are left to your own devices to figure out how to imitate Art, which is the implied and impossible victory condition. These arbitrary criteria and standards satirize institutional systems of artistic appreciation.

Great Artist is a digital sketchpad, a more interesting version of MS Paint, that is invitational and inclusive. It unironically invites you to become a great artist in ten seconds by interrogating conventional ideas about what arbitrary labels like “great artist” mean. *Great Artist* says, “Don’t be intimidated by what some people have decided art is. Just make something.” Liz Ryerson also creates in *Great Artist* and posts the results on tumblr. The works are sometimes abstract, but often reveal some recognizable object or landscape identified

in the title for the audience to latch onto. One of these works, *mountain side*, does indeed resemble a mountain but the focal point of the piece is a looming god-like figure who seems to be made of ocean foam and cloud wisp spilling out into the surrounding sky. As in early surrealist works, there is an implied merging of elements portrayed in action. My favorites feature isolated images that seem to tear out of solid, solemn surroundings, like *shard* which shows a metallic rust-colored razor object surrounded by darkness, or *planet’s atmosphere* which has graffiti amoeba shapes seeping into one another, surrounded by white space. These works share in a sense of the uncanny, of vaguely recognizable figures crawling out of some abstract elsewhere.

In the “Glitch Jam” held in 2014, it is interesting that some of the most highly rated games (by popular vote) such as *Glitch/Quarantine* incorporate a glitch aesthetic that is clean, logical, and precise where there is a vague allusion to erratic technology without any sense of occult machine apparition. In contrast, *Conform*, a game which received zero votes, only lasts for a few seconds and it is unclear if this is because your avatar has been killed or because the game simply closes. Another low-ranked game, *Sector 58* presents an arbitrary leveling system and a knife-swinging attack that sometimes works arbitrarily. On the download page for *The sky above...*, the author lists the following as a “known bug”: “On Windows & Linux one of the glitches is not as it should be.” What’s interesting to consider here is that this game jam event invites authors to include glitches, and then the games are ranked according to how smoothly glitches are incorporated. As players we approach these games with the expectation

of encountering something that looks or feels like a glitch, and our expectations dictate that we want this glitch to look and feel a certain way that doesn't feel genuinely accidental or unstable, but instead premeditated. But it is just as likely that we will encounter unintentional glitches simply because game jams encourage amateur authorship over a brief production schedule. In playing these games, we wonder whether or not we are "discovering" a glitch or passively experiencing a glitch that was placed there deliberately for us. This tension is arguably produced by the circumstances of the games, just as much as it is encouraged by the structures within the games themselves. Are we encountering a glitch as a part of the imagined player that the author theoretically designed the game for, or is our encounter simply an accident, like the origin of the glitch itself?

* * *

An early arcade example of glitch as performance was not a glitch you used to get ahead, but a glitch you tried to reach only to have it kill you. The "kill screen" glitch (exactly what it sounds like) represented success itself rather than an alternate avenue for achieving success. Allegedly, Billy Mitchell reached the *Donkey Kong* kill screen in 1982 when several of the top arcade players were gathered together for a photograph in *Life Magazine*. This may have been the first documented public event where a kill screen was achieved.¹⁷ Mitchell's *Donkey Kong* score was not bested for nearly two decades.¹⁸ Surely others must have reached the kill screen in between, but for years most would have wondered what it was like at the end of a game that was theoretically infinite.

In 1993, Id Software's *Doom* motivated players

to use glitches to complete levels skillfully and quickly. *Doom* raised the stakes by allowing players to record demos of their playthroughs. To accommodate this new style of performance play, communities developed speed running practices and terminology such as the "grab," which means to take an item from a space you're not supposed to have access to, usually behind some impassable wall. In *Doom*, a grab is executed by strafing (running forwards and sideways simultaneously to increase movement speed) against the wall. The coupling of these two unanticipated actions tricks the game into thinking the marooned item is within reach. With the release of *Quake* (1996) speed running developed larger communities and more organized online infrastructure. To hone their craft, runners practiced techniques like rocket jumping (firing a rocket at an adjacent floor or wall in order to propel yourself forward) and bunny hopping (repetitive jumping that allows you to move faster than running). Speed running terminology has only become more specialized and its techniques more esoteric. "Sequence breaking" refers to disrupting the linear order of a game or skipping entire sections. For example, an absurd backwards long jump technique makes it possible to complete *Super Mario 64* with zero stars. A 2013 video of a *Legend of Zelda: Ocarina of Time* run includes the runner's own oral history and explanation of how glitches were discovered by an online community over the course of fifteen years. He explains the history that allows him to complete the labyrinthine game in twenty-two minutes, thirty-eight seconds as he does it in real time. Over the past couple of decades, factions have splintered off over debates about the nature of the true speed run. There are

now youtube threads packed with people arguing about whether a performer's weeks spent meticulously researching, mapping, timing, tweaking, executing, and perfecting a sequence of glitches (an exercise surely more challenging than playing the game itself) is or is not actually impressive. I guess that means we've made it.¹⁹

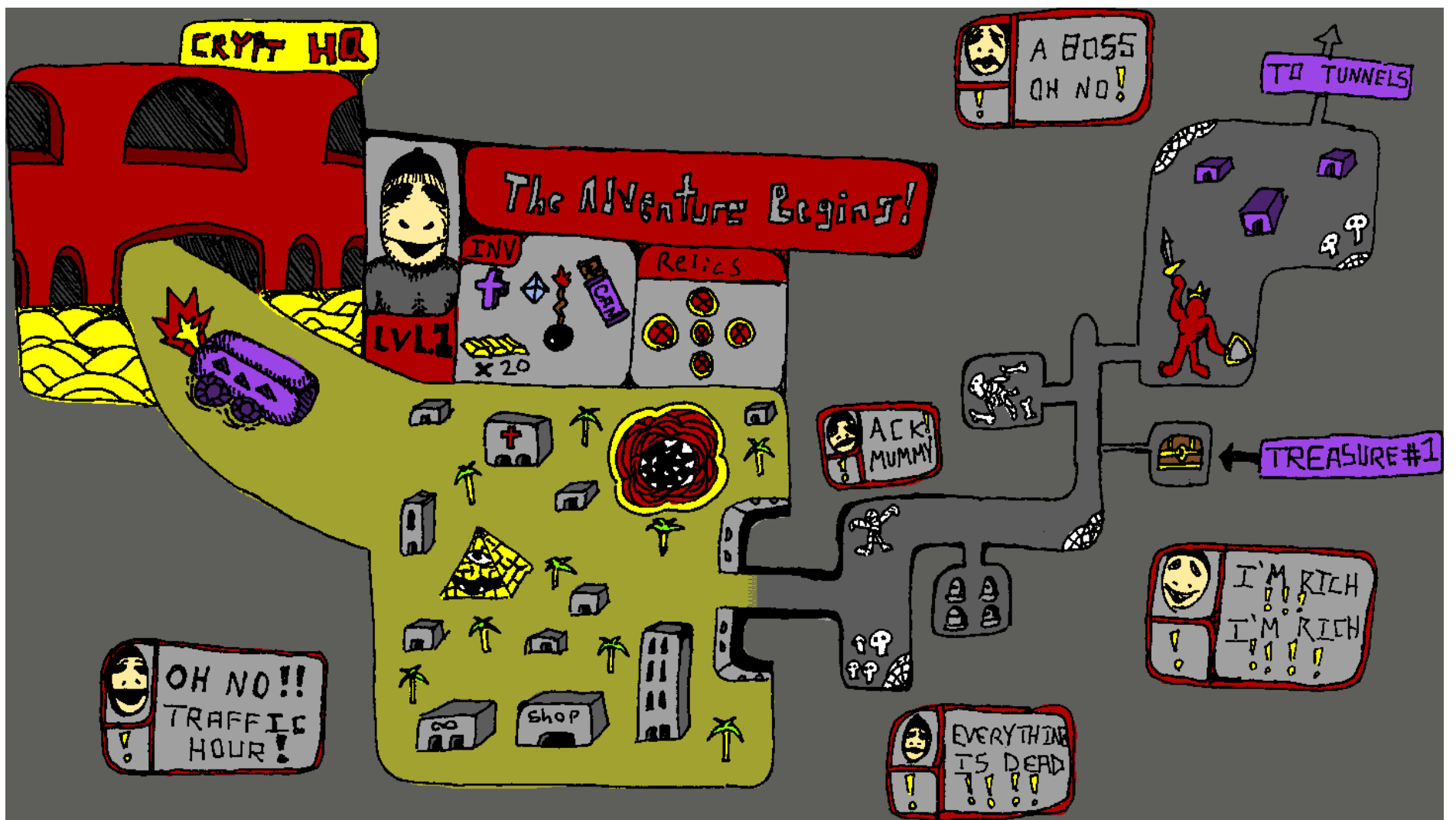
Glitches give us a chance to think about games differently. They inspire the tenth definition on Urban Dictionary dot com to define glitch as "the thing that gives video games meaning and purpose." Glitches indulge our fantasy of engaging with a system in a way that neither its rules nor rulers predicted. They reveal that the system was never pure in the first place and that pristine polish and usability are misplaced ambitions. I am interested in glitches because they imply competing traditions: one authored, and one accidental. Jarring, they counter what is commonly referred to as "immersion" or the experience of forgetting yourself in a fake world. At their best, they refuse to allow us to indulge in a hyperreal fantasy. They simulate memory, unreliable and fragmented. Often, they humiliate the generic trappings they are supposed to be subject to. In the hilarious "Breaking Madden" series, SB Nation writer Jon Bois undermines everything about the image that EA Sports must have intended for their game. Bois (after hours of laborious, statistical tweaking) makes a spectacle out of the farce of unanticipated consequences, but also reveals that the farce is probably what was most interesting about the game in the first place. The performance reminds us that we might prefer mysterious, creepy, amusing fragments to the holistic forms that we often end up consuming.²⁰

Alex Pieschel is an editor at The Arcade Review.

A Conversation with Lilith

Lilith is an artist and game-creator behind numerous freeware titles and browser-web games. Her work, including “Crypt Worlds: Your Darkest Desires, Come True,” Symbol, No Escape Saga, Dark Field, Fantasytopia, Mutation, and Aspirations of The Flyer, span between first-person, simulative and experimental styles. I chatted with Lilith about her work, old abstract 3D games, growing up in Suburban Minnesota, and dealing with mental health.





Zolani Stewart: I'd like to start by talking a bit about N64 Games. As a critic, I've been interested in the N64 a lot lately, and early 3D Games. When I play a lot of freeware games and art games that are in Unity, I get this vibe from them that reminds me of "old 3D," and I get that a lot when I play some of your games. I was playing, what was it called.. Jacuzzi Shop! and it reminded me of Golden Eye. Those muddy, stonish textures you see in the first level.

I guess I'm interested in your thoughts about that 3D "style" and if there's anything particular about it that interests you.

Lilith of the Maze: A lot of the appeal of that stuff, for me, is how unrepentant it is in being abstract and strange and totally incoherent. Mario 64 is just all these little playgrounds of cubes and pyramids and intersecting geometry smothered in a mess of vague textures. Things that look like they could be anything (desperate attempts to digitally recreate real, 3d geometry as tiny 2d tileable square). Like I realize

a lot of this is the result of limitations of the technology at the time, but as a kid I didn't know any of this, so it just seemed like these mysterious blurry sub-worlds kinda nestled below our own, stored away in physical media and posing challenges to keep you out. It was something really alien and unknowable and difficult to project onto anything I would see in my day-to-day environment.

Zolani: The key strength of abstraction is how you can meld it, right? I usually think of a scale, between "full abstraction" or "full representation," like realism, both of which I'm not sure can ever be fully reached, and you can kind of mess with the knob of which direction you want to go. There's this point between something being abstract but where you can still make out a few shapes, or ideas. Like in F-Zero X there are no road textures, they're just colors on these roads that bend and meld in these surreal ways. You don't actually know what they're made of, or even if they're supposed to be roads at all, but you have car looking things and you go fast on

them so there's a small implication, and it still really gets to me now.

You're mentioning how you can project everyday things onto these objects... what I like about your games is the way they sort of... insert these explicit everyday things and remove their context. I was playing Mutations today—same muddy textures on the wall, this really ugly lime, almost like slime, but the mention of the smoke and all implies that maybe it's all industrial. When you walk in this hall, you see all these couches, couches and chairs, and empty bookshelves.

These everyday things that are supposed to be comforting are put into this place where they actually confuse us. So as "alien" and as lost as these places are they always seem to elicit familiar feelings in me. As abstract as they are, I feel like I can still connect these to moments I've had.

Lilith: I mean, a lot of the geometry in my games is just a huge garbageheap of abstracted memory space, trying to recreate somewhere I went on a

roadtrip, or a hotel I stayed at as a kid, or some game I played in a waiting room. just dredging up isolated images and trying to fill in what i can't remember, make it into 3d block structure and plop some images I ripped off google into em. It's all bullshit fictive reality so you can toss a bunch of shit together and nobody can really say it's wrong. if anyone does I'll track them down and make them listen to my seminar on why Games Are Important + Good.

Zolani: lol

Lilith: I figure most of these older 3d things were just desperately grappling with hardware limitations and trying to fit FUTURECITY or BONE DUNGEON into smallest possible container they can get away with, so you got a lot of really strange garbled noise when anything got made over 100 unique poster textures but every chair in the game is the same model of a block with a triangle attached.

Zolani: Do you think there's a nostalgia in doing this with your games, then? With recreating this sense of... wonder and 'lostness' of these abstract places?

Lilith: I feel uncomfortable exalting the Innocence of Child or like nostalgia for those things but it's definitely been really formative on how I perceive the world around me—not just games, but the disorienting mass of systems constantly operating around me whether I knew them or not. This gets into weird personal stuff, but my whole life has felt like constant sea of noise, and everything is drowned in overwhelming amounts of confusion and alien misunderstanding. I am basically a degenerate 10-year old who feels confused by everything. Making games just feels like extension of this, I guess.

Zolani: mhm

Lilith: Exploring how these things feel and how I'm not sure what I feel. I do feel deeply turned on by grinding against game geometry, though, for anyone wondering. i know that much.

Zolani: Then let's talk about geometry a little bit! One of my favourite games of yours is actually Symbol. It might best represent that fascination with geometry and the "space". I notice, a lot, especially when I was playing games like Jacuzzi, and even some of the Lilith GOTY games, a fascination of symbols and geometry. Statues and large ominous structures, like the "houses" in Symbol.

And just on a geometry level, a lot of these structures are mostly made of these thin pillar-like objects. All the pillars get smaller when you get to the tip, so they're a bit like cones, so they feel really alien. Like they're beacons, or something.

I'm wondering about anything particular you like to do, on a geometry level. I always enjoyed how there was a mix of how open these spaces can be, but there are also these little trappings where you feel surrounded by complex geometry, geometry that you can't really parse

Lilith: yeah well I went to the Vatican as a kid so I'm sure all the baroque architecture helped with that

Zolani: I noticed the church area too in the Jacuzzi game

Lilith: I mean those houses were based on mixture of geometry from dream i had a kid + memories of wandering around all the rapid neighborhood construction in the formerly rural area of minnesota I lived in. All these frameworks of buildings with nothing filling them up, being like 9 as it gets cold and dark out and looking around through these generic wooden grids.

And I have huge fixation on architecture, especially with baroque and gothic stuff. My first crush was on the rose window of Notre Dame ;o

Zolani: in France?

Lilith: yeah!

Zolani: ah yeah I went there on a high school trip once

Lilith: When i was 4-5 i would draw tons and tons of cathedrals and illustrations of stained glass windows. I'm a nerd... sigh... sigh

Zolani: Some of your work does have a neat childish tone to it. The doll thing in the Jacuzzi game, and the sort of.. cheeky nature of how some the characters in your games move about. It's weird to see that doll thing twice in Jacuzzi, once *as* a doll in the church and somewhere else as if it came to life. So it does sometimes still feel like a child's fascination with these environments and objects.

Lilith: Honestly the reason it originally appears as a doll was because I needed two things to put on the pedestal, and I didn't wanna put the other character twice. Any grace attributed towards me is ill-informed as I am incapable of parsing ingenuity. Example: I almost quit making crypt worlds multiple times and ultimately only finished it because my piss fetish allowed for it to happen.

Zolani: Wow, nice.

I was also thinking of one of the Lilith GOTY games where you get chased around by a ghost but they all look really funny.

Lilith: Those models were by the catamites!! It was a collab... but I guess that was never stated huh.

But yeah like, I always feel like I care a lot about tiny weird details nobody notices and ultimately have a hard time relating to things without just representing them as dorkiest, tinniest cartoon caricature possible. So usually this comes out as just inane unrelated slew of visual elements that probably don't make much sense together. Robertcop bootleg toy in SYMBOL was my shining moment.

Zolani: yes!

Lilith: I guess I don't want to make things that are "serious" or "comedic" and would much rather just try to accumulate as much weird, goofy and kinda dreamy stuff as possible in one place. Nothing makes much sense to me anyway so trying to be honest~ Even the most Important Inspiring Beautiful things are submerged in a world that's governed by horrifying, silly, brutal, messy and arbitrary rules.

Zolani: Just expressing what gets to you and trying to have fun?

Lilith: I mean yeah mostly I just want

to slam a bunch of mspaint drawings and images i ripped and edited from google image search and make something, cause usually I'm sitting around alone so it's better than laying on floor crying~

Zolani: I get really anxious when I'm alone at night. My room has a lot of electronics in it and I start to feel overwhelmed. I start like, pace and stuff. It's why I try to go for walks as often as possible. There's also this thing of twitter too where people who are alone by themselves find ways to waste time and doing something without feeling that void. The void of loneliness? That sense of quiet when you're in a house alone. It's really uncomfortable

Lilith: I mean part of the reason I can't use social media consistently is because yeah that stuff briefly fills a void, but then I feel even more aware of how alone I usually am. This has recently started changing but at night, alone, in the city when it's dark... it's beautiful but lonely and very overwhelming feeling trapped in

this place. I usually am afraid to go out alone at night because in San Antonio I had a couple rly awful experiences. But as late as mid-last year I'd have these phases where I'd think I was dead—like logically could recognize I was "alive," but was irrelevant and had no human contact that wasn't facilitated by machines usually, so nobody could physically be there and assure me I wasn't a ghost. I'd lay in bed and have panic attacks for hours at night cuz I'd feel like i was trapped in a tomb. I've been isolated a lot of my life and feel very alien in relation to most things I encounter. A lot of the formative experiences in my life have been traumatic things in mental hospitals, being funneled through the public school system, being in an abusive relation for 8 years, and just... it surfaces in almost everything I do I think.

One of the major forces behind the dark dreary halls and passages in a lot of my 3d stuff is actually memories of mental hospitals. These contained indoor zones with no windows, where you weren't allowed to go outside until



Lilith, Dark Field, (<http://cicadamarionette.com/Pages/DarkField/index.html>)

several days of good behavior, and your level was “raised”—so it would just be countless days of panicking and being trapped inside this dimly-lit, carpeted chamber. Not much to do... weirdly futile isolated hellzone.

I always wonder if this stuff tints my games or if it's noticeable at all how claustrophobic and scary most places feel for me now

Zolani: I would say it is, I rarely play your games and feel like inhabitants in these worlds are enjoying themselves. Sometimes it feels like they're used to it. Like in Mutation, where when you look at the avatar's face when they start to get more mutated, they seem to elicit that much emotion from what's happening to them. They don't look freaked out

Lilith: To be fair her face is a horrible gnarled mess, I'm sure it's hard to express much with it! But idk like most of the factions in crypt worlds were mostly just tons of people who were okay or at least tolerating, their horrid living conditions and trying to find best ways to justify it. I don't know how to do this so instead I curl up in blankets and cry. Weird contained universe ruled over by Pain God and Evil Guy but everyone is cool with it cuz who's gonna change that.

Zolani: Crypt Worlds was the game I played the least, actually ^_^” I'm not good at games where you have to find secret stuff; I'm bad in games in general. Also the long black hallway freaked me out and I was too scared to go further than teh burger place.

Do you think making these games helps you with these traumatic experiences? Would you say it's somehow therapeutic? For the last

issue I was talking to Amy Dentata, who made 10 Seconds in Hell, which was about an abusive relationship, and she told me how like, she can't really play the game anymore, it freaks her out too much.

Lilith: I don't know if it's therapeutic, so much of it has been a way to detach myself from my environment, and at least figure out a way to manifest those feelings and memories without directly touching them. I've been unable to work on those sort of intense 3d spaces as frequently this year since I've actually been trying to sort things out, and it's difficult to actively look at... but when I was constantly alone in my apartment, with nothing in the foreseeable future, the best I could do was escape and try to work with these things as best I could with what I had available

Zolani: Maybe maybe it's a good sign that you're making this stuff less often, that you get to work on yourself, and build a healthy irl environment for yourself. I mean, there's this whole narrative in Indie Games of these white men who work to death on this stuff, and don't take care of themselves.

Lilith: I mean, it's the first time in my life I've had any sense of being so it's pretty cool

Zolani: A sense of being is a nice thing to have, yes

Lilith: I don't know, I don't feel much connection to The Medium or Game Culture and mostly just like memories of how games interfaced with my world or like sharing things with friends but, I still like making tiny weird things and hopefully can still find ways to keep making things.



Zolani: I'm not sure if there's any good reason to get involved with the Culture to be honest, haha.

You mentioned before about growing up in rural Minnesota. Is there anything particular about that place, about growing up in that kind of area?

Lilith: It wasn't that rural, it was in Andover, which is a suburb of Anoka, which is also a suburb of Minneapolis. I think, I lived like a 30 minute drive from the city so my parents would always drive me to the city to visit museums and historical sites, do activities, etc... there was always this feeling of entering this enormous impossible place with all these institutions and intricate infrastructure shaping the landscape... something really overwhelming to me still thinking about driving on the highway and seeing over time how the trees and little strip malls turn into this ocean of skyscrapers and machinery. By the time I moved

away from Minnesota at 11 though, the area I lived as a kid was much more urban, and was constantly under construction. Even in a few years it had become a drastically different place. I haven't been there since i was 14 but I'd imagine it's even more like that now.

Zolani: As a last thing... unless I think of something else , I usually like to ask folks about interesting games they've played lately. Are there any cool ones you'd like to talk about? Or perhaps movies or music, books, or art shows or whatever interesting places or you've been lately

Lilith: I am incredibly in-love with Porpentine's "pink zone" and it has been really inspirational for me lately, along with some of thecatamites new little construct2 games. I'm hoping to do more webtoys myself, little contained dollhouses and systems to mess around with. Other than that I'm still just wandering mysterious locales and listening to bad techno music

Zolani: One of those webtoys was Fantasytopia, right?

Lilith: Yeah, and today I finished a new thing called "Your favorite song" It's about making your favorite song...

Zolani: I'm playing it now!



You can play Lilith's games at cicadamarionette.com



Unreliable Words

By Amsel Von Spreckelsen

1. Wayne Booth, *Distance and Point-of-View: An Essay in Classification*
2. Anne Whiston Spirn, *The Language of Landscape* [**Read it Here**]
3. Zoya Street, *Dreamcast Worlds* [**Buy it Here**]
4. Greg Costikyan, *I Have no Words & I Must Design* [**Read it Here**]
5. Greta Olsen, *Reconsidering Unreliability: Fallible and Untrustworthy Narrators* [**Read it Here**]

Games

1. Adam Cadre, *Photopia*, 9.05 (PC) [**Play it Here**]
2. Jon Ingold, *Fail-Safe* (PC) [**Play it Here**]
3. Infocom, *Zork, Hitchhiker's Guide to the Galaxy* (PC)
4. Steve Jackson and Ian Livingstone, *Creature of Havoc* (Gamebook)
5. Kim Newman, *Life's Lottery* (Gamebook)
6. Ryan North, *To Be or Not To Be: That is the Adventure* (Gamebook)
7. Irrational, *Bioshock* (Multiplatform)
8. Valve, *Portal, Portal 2* (Multiplatform)
9. Ubisoft, *Call of Juarez: Gunslinger* (Multiplatform)

Anyhowly Anyhow

By Krish Raghav (@krishraghav)

1. PAP 2048 (PC), [**Play it Here**]

Glitches: A Kind of History

By Alex Pieschel (@gamesthatexist)

Footnotes

1. Philip Storey submitted an undergraduate thesis called “Glitch Aesthetics, Surrealism, and the Death Rattle of the Author” to the University of British Columbia in 2012. Storey analyzes the Minus World and MissingNo. glitches among others, which he compares to several twentieth-century surrealist works. Reading Storey’s essay helped focus and organize my own.
2. A twitter conversation with Michael Lutz helped formulate my thoughts on MissingNo.
3. Because of how memory was stored on gameboy cartridges, MissingNo.’s traits are connected to the letters in your avatar’s name. By selecting a particular name, you can predict the type of glitch you encounter. See [this analysis](#) for more info on how and why MissingNo. appears.
4. Unless otherwise specified, definitions taken from Oxford English Dictionary.
5. This distinction is borrowed from footnote #15 in Eben Holmes’ [“On Strange Reality: Glitches and Uncanny Play”](#) (2010).
6. Difficult to find a relevant quote from Nishikado, but the hardware limitation/bug is referenced on the Space Invaders Wikipedia page and also in a [couple](#) of different [lists](#) and [forums](#).
7. Again, difficult to locate a direct quote that references sprite flickering, but the glitch is mentioned in [this list](#). Also mentioned on a site called the [Easter Egg Archive](#): “Find the central room that causes the screen to flicker. You must have an object with you to see the flicker, as it takes 3 game sprites to cause flicker (you, the “dot” and the 3rd object, in this case the bridge).”
8. See [“Origins of the Easter Egg”](#) by Skot Deeming in Memory Insufficient, Volume 1, Issue 8, 2013.
9. For a fairly exhaustive history of videogames, see Tristan Donovan’s *Replay: The History of Videogames* (2010). For a historical video series that is pretty thorough and also free, see The Drisk’s [DSK V.G.H.](#) For excellent histories of shareware and homebrew communities (often neglected in other videogame histories) see Anna Anthropy’s *Rise of the Videogame Zinesters* (2012) and *ZZT* (2014).

10. Two papers were helpful for their work in tracing a proto-glitch thread in art history: [“Glitch Aesthetics”](#) by Iman Moradi (2004) and [“The Glitch Aesthetic”](#) by Rebecca Jackson (2011). Also helpful was a wiki article by Nick Briz published in something called a [Glitch Reader](#). I think the wiki article is probably facetious, but I’m not really sure. Paintings were viewed on [wikiart.org](#).
11. See Lisa Adang’s [“Untitled Project: A Cross-Disciplinary Investigation of JODI’s Untitled Game”](#) for a granular analysis of the Quake mod and also a more thorough description of JODI’s early history and work.
12. In fact here is an ironic, faux-academic [“Introduction to net.art,”](#) complete with bullet points, actually pretty funny, somewhat true.
13. Olia Lialina is another net artist who worked with hypertext in the mid-90s. It’s fun to think of stuff like [My Boyfriend Came Back from the War \(1995\)](#) as proto-Twine. [The Most Beautiful Web Page \(2001\)](#) is a nice universe sandbox. Scroll up and down to view universe. Zoom in and out to admire stars.
14. Liz Ryerson articulates and explores this idea in depth in the essay [“The Talk of Magicians.”](#)
15. [“Fashion, Emptiness, and Problem Attic”](#) by Brendan Vance is the most rewarding and in-depth writing I have seen on Problem Attic.
16. Silverstring Media’s Glitchhikers (2014) takes another approach. It’s a pensive driving game full of Lynchian meditations on how accidental human encounters are both mundane and beautiful. Playing Glitchhikers in large part provided the genesis for this project.
17. According to [this page](#) on the site Classic Arcade Gaming.
18. See the documentary King of Kong: A Fistful of Quarters (2007).
19. See [“Spead Freaks”](#) by Edge Magazine (2007) for some decent early history of speed running on a somewhat broken page layout.
20. A twitter conversation with Zolani Stewart and Brendan Vance was very helpful in formulating ideas for this essay. Others were helpful in providing examples and definitions. Conversations storified [here](#). Also helpful was an email exchange with Stephen Murphy. Thanks everyone!

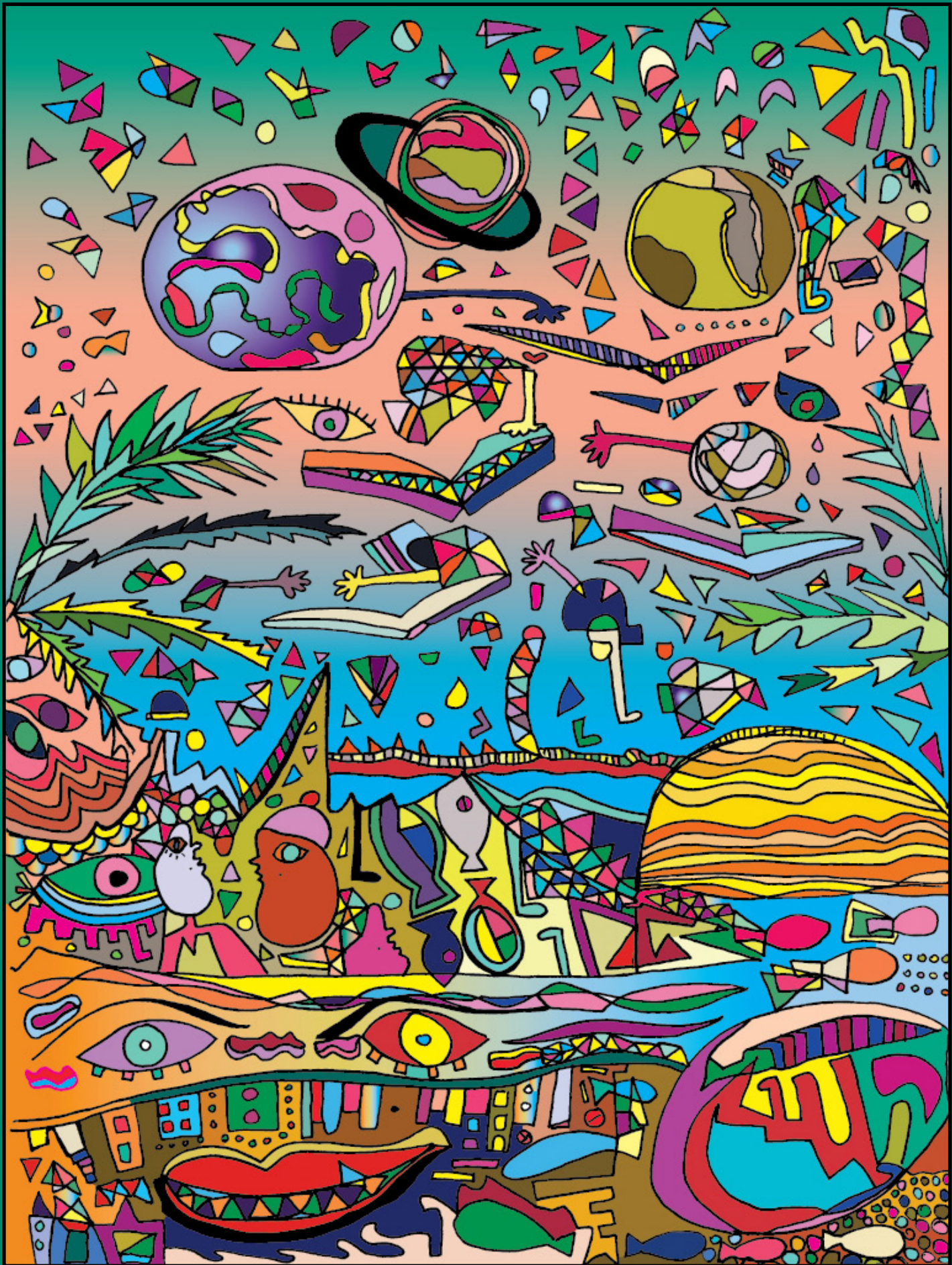
GCYOAW

By Stephen Murphy (@thecatamites)

Ending Notes from Stephen

“PS: In the above I have written about Gassy Choose Your Own Adventure Weirdo as part of a particular homebrew videogame context, or at least my memories of same. There is another way to look at it, as part of an individual corpus of work which temporarily intersected with a wider scene. After working on several game projects Ragnar now primarily composes mysterious electronic music under the name of DJ Saint-Hubert, and his latest EP is available here as pay what you want: <http://djsaint-hubert.bandcamp.com/album/diaper-of-the-dead-ep>. GCYOAW is available at <http://saltworld.net/forums/topic/12039-two-old-ragnargames/> along with another unfinished game by this developer called Jackie Chong which he notes “has some of that SNES fighting game enthusiasm about urban spaces and their potential for dramatic fight scenes”.

Our Cover



This Issue's cover was created by Ellie Rassia, an artist and illustrator out of Athens, Greece. You can view her work at ellierassia.com.
Thank You, Ellie!

THE ARCADE REVIEW

Staff

Zolani Stewart

Alex Pieschel

Past and Current Contributors

Lana Polansky

Line Hollis

Owen Vince

Emilie Reed

John Brindle

John Kilhefner

Brendan Vance

Stephen Beirne

Amsel Von Spreckelsen

Krish Raghav

Stephen Murphy

Support Our Peers!

[Warp Door](#)

[Five Out of Ten Magazine](#)

[MammonMachine ZEAL](#)

[First Person Scholar](#)

[Critical Distance](#)

[Memory Insufficient \(And It's Corresponding Project\)](#)

Thanks for Reading!

arcadereview.net
@arcadereview